CrossTalk

February 2025 — *66 Years Of Service To Amateur Radio & Our Community* — *Issue 66 : 02*

2025 Club Officers

President :	**Jonathan Pearce, WB2MNF**
Vice President :	**Ronald Block, NR2B**
Treasurer :	**John O'Connell, K2QA**
Recording Secretary :	**John Zaruba Jr, K2ZA**
Corresponding Secretary :	**Michael Resnick, N2WOQ**

Trustees - 4 Year Term

Charles Lanard, KD2EIB	**(2022-2025)**
Sheldon Parker, K2MEN	**(2023-2026)**
Len Rust, W2LJR	**(2024-2027)**
Earl Moore, KC2NCH	**(2025-2028)**

Directors - 3 Year Term

Chris Prioli, AD2CS	**(2023-2025)**	**Bill Price, NJ2S**	**(2024-2026)**
James Wright, N2GXJ	**(2023-2025)**	**Jeffrey Garth, WB2ZBN**	**(2025-2027)**
Al Arrison, KB2AYU	**(2024-2026)**	**Frank Romeo, N3PUU**	**(2025-2027)**

General Membership Meeting
Wednesday, February 5, 2025 @ 1900 Hours
In-Person & ZOOM : 914 7364 1808, 843147

Tech Saturday Forum
Saturday, February 8, 2025 @ 0900 Hours
W2MMD Clubhouse

License Testing Session
Thursday, February 13, 2025 @ 1900 Hours
W2MMD Clubhouse

Board of Directors Meeting
Wednesday, February 19, 2025 @ 1900 Hours
W2MMD Clubhouse

Dinner @ The W2MMD Clubhouse
Wednesday, February 26, 2025 @ 1800 Hours
W2MMD Clubhouse

GCARC TechNet ZOOM Forum
ZOOM Meeting ID : 933 9943 3123, 800835

Tuesday AfterNoon 2M Net @ 1200 Hours
Thursday Night 2M Net @ 2000 Hours

Tuesday & Thursday 10 Meter Net @ 1930 Hours
28.465 MHz or 28.475 MHz

Monday & Thursday Night 40M Net @ 1930 Hours
7.225 MHz (+/- 5 or 10 kHz)

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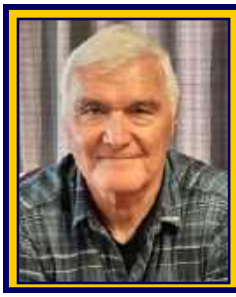


President's Letter
Jon Pearce, WB2MNF

February 2025

As we welcome February, it's great to see our progress and to share the exciting updates for this month. January set a robust foundation for our plans, and we are poised to build on that momentum.

Tech Saturday CW Training Session : John Zaruba K2ZA did an outstanding Tech Saturday Forum on January 8th on learning Morse Code (CW). He covered how the brain processes audio messages like CW and how to structure training to maximize its effectiveness. He also brought several keyers for demonstration, making the session both informative and engaging. We appreciate John's effort in enhancing our members' skills and knowledge.

Implementing a DMR Repeater : Significant progress is occurring on the DMR repeater that will soon be operational at the ***Rowan University*** site. The configuration is being designed to allow operation on the usual ***Brandmeister*** network on timeslot 1, optimized for group chat on a GCARC-specific talk group as well as private calling. Timeslot 2 will be configured to connect to a GCARC node, facilitating cross-connections to ***Yaesu System Fusion (YSF)*** radios and potentially the M17 radios that are in development. We hope to have this system operational by early February. The Tech Saturday Forum on February 8th will be an overview of DMR operation for those unfamiliar with this communication mode. Several other Saturday Clubhouse sessions will be dedicated to setting up DMR radios and local hotspots to take full advantage of these resources.

The New VHF Station in the ARRL VHF Contest : The VHF team of **Al KB2AYU**, **John K2QA**, and **Frank N3PUU** operated during the ARRL VHF Contest on January 18th and 19th. The team reported working through several technical issues involving getting radios, computers and software to work together. Band conditions weren't great and 6 meters only had occasional openings making QSOs sparse. FT8 was helpful in expanding the contact list and the team was able to come close to the previous high score. The experience not only highlighted the station's potential but also provided valuable learning opportunities for all participants. We look forward to more such events where we can utilize our station and enhance our operating proficiency.

Got My License, Now What?" Session : We have planned a ***"Got My License, Now What?"*** session for newly-licensed hams for early February based on the large number of new licensees since our last session about six months ago. This session, presented by several of our Club leaders, will offer a high-level survey of many different areas of the ham radio hobby. It is intended to be a starting point for new hams to explore the numerous aspects of the hobby and identify the ones that interest them the most. We encourage all newly-licensed members to attend and take advantage of this opportunity to kickstart their ham radio journey. Announcements of the date will be made once it's finalized.

Emergence of New Handheld Radios and Modifications : There has been a surge in new handheld radios and various modifications, both in hardware and firmware. For instance, the BTECH UV-PRO radio features a USB-C port for charging, Bluetooth connectivity for programming, is waterproof, and has an internal KISS TNC for packet communication with phone apps, including Winlink. In addition **Chris AD2CS** recently built the KV4P HT, an ESP-32 based radio that connects to an Android phone through a USB-C cable, turning the two devices into a VHF HT.

President's Letter - Continued on page 3

President's Letter - Continued from page 2

Many firmware modifications are available for Quansheng HTs, adding functions such as a spectrum analyzer and other functionalities. For DMR use, the low-priced Radioddity and TYT HTs can be flashed with OpenGD77 firmware, creating a ham-capable DMR radio at a much lower cost (albeit with less functionality) than the common Anytone radios. Additionally, Chris is undertaking a hardware modification for the TYT MD-380 radios to enable them to run OpenRX firmware, utilizing the new ham-developed M17 digital mode. Given the variety of these options, we are planning to dedicate a Tech Saturday Forum in the Spring to explore these exciting developments.

M17 Experimentation : We are also excited about the experimentation with the M17 protocol. M17 is a ham-developed digital voice and data protocol that is open-sourced and being developed by the **M17 Foundation (https://m17foundation.org)**. Although it's still experimental, its use is promising as it frees ham radio from the proprietary modes used in DMR and other similar modes. We have ordered several of the M17 development modems along with the TYT HTs that Chris is modifying, and the new digital repeater at ***Rowan University*** may soon have M17 capabilities. There are also software solutions running on Windows or a Raspberry Pi computer that may be interesting for members to explore. If you're an experimenter, you might be interested in getting involved in this innovative area.

Looking towards warmer weather (because almost anything would be warmer than today's 22 degree high) we're planning some new construction projects, fox hunting opportunities, technical projects like bouncing signals off of the Moon and continuing with a full schedule of speakers at General Membership Meetings and Tech Saturday Forums. The Clubhouse is always open on Saturdays, so stop in to see what's happening or if you have questions about any aspect of ham radio.

73 de Jon WB2MNF

There is a new website for the Gloucester County Amateur Radio Club Volunteer Examiner Team. Everything you need to know about getting your ham license or upgrading your license can be found on this website. Pass It Around!

https://veteam.w2mmd.org

Welcome New Club Members :

Marshall Baker, KC2DFO, a Technician Class from Eastampton, NJ.
Bryan Bossle, KE2APN, a General Class from Sicklerville, NJ.
Troy Clancy, KE2BXW, a Technician Class from Franklinville, NJ.
Kevin Wittwer, Associate Member, from Mullica Hill, NJ.

We are glad to have you as members of the Club and hope to see you regularly at Club meetings, events, and activities. Hope to see you at the February 5th General Membership Meeting, either in-person or on ZOOM, the February 8th Tech Saturday Forum, the Board of Directors Meeting on February 19th, the Dinner @ W2MMD Clubhouse on February 26th, and the Monday Night GCARC TechNet ZOOM Forum.

We also hope to ***"SEE"*** you on the ***"AIR"*** on the following nets :

- Sunday Night Skywarn 2 Meter Net @ 1930 Hours.
- Sunday Night ARES 2 Meter Net @ 2000 Hours.
- Tuesday AfterNoon 2 Meter Net @ 1200 Hours.
- Tuesday & Thursday Night 10 Meter Rag Chew Nets @ 1930 Hours on 28.465 or 28.475 MHz.
- Monday & Thursday Night 40 Meter Nets on 7.225 MHz (+/- 5 or 10 kHz) @ 1930 Hours.
- Thursday Night Rag Chew 2 Meter Net @ 2000 Hours.

All 2 Meter nets are on our 147.180 MHz (PL 131.8) repeater or on EchoLink W2MMD-R.

"Got My License, Now What?"
Early February 2025
W2MMD Clubhouse

Check the website and e-mail reflector for date and time

This session, presented by several of our Club leaders, will offer a high-level survey of many different areas of the ham radio hobby

General Membership Meeting

Wednesday, February 05, 2025 @ 1900 Hours

Pfeiffer Community Center

Simulcast Live Via ZOOM : Meeting ID : 914 7364 1808; Passcode : 843147
Join ZOOM Meeting Link : https://bit.ly/3Pt4dLO

Go to : www.w2mmd.org to download the ZOOM log-on instructions PDF

Woodruff School's STEM Club

By Angela Metzger, KE2DRJ

The Woodruff School's STEM Club began with a goal to engage students in ways that traditional after-school programs might not. Initially proposed and approved for a 10-week period, the Club sought to gauge student interest in science, technology, engineering, and math. The response was overwhelmingly positive, as students demonstrated a keen desire to expand their knowledge beyond the classroom.

The STEM Club's early focus was on Amateur Radio, specifically through the launching and tracking of high-altitude balloons. Collaborating with GCARC members **Jon Pearce, WB2MNF**, **Mike Resnick, N2WOQ**, and **Mike Thompson, KG4JYA**, the students learned about balloon science, transmitter functionality, and the role of Amateur Radio. They developed practical skills such as soldering, monitoring wind patterns, building payloads, measuring antennas, and problem-solving.

Figure 01 : STEM Club Balloon Launch November 14, 2024

The program's initial phase concluded with two balloon launches - one solar powered and the other battery powered. Each launch yielded different results, providing valuable lessons in both success and failure.

Inspired by these experiences, several students addressed the school board, advocating for the continuation of the STEM Club. Their presentation led to a unanimous approval, allowing the program to extend through the rest of the year. The Club has since enabled students to explore new concepts and sparked an interest in obtaining Amateur Radio licenses.

This month, Angela will present an overview of the STEM Club's journey and achievements. Students and parents are expected to attend and show their support. Join us for an insightful discussion about this innovative program and its impact on the students. This should be good! See you there.

Figure 06 : Waiting For Clearance To Launch

Fox Hunt 32 : Winter Fox Hunt
Sunday, February 16, 2025
1300 - 1400 Hours

Winter Fun For The Whole Family!

Al Arrison, KB2AYU will be ***"The Fox"*** this time.

Everyone needs to checked in on the 147.180 repeater by 1300 Hours. There will be some brief instructions, then the Club's foxhunt transmitter will be switched on by Al somewhere in Gloucester County.

Al will send further instructions in an e-mail on the Club's reflector by Saturday, February 15, 2025.

The basic idea is that the closer you get to the transmitter, the stronger the signal. The first to find it has the privilege of hiding it for others to find next time. Those who find it will step away to allow others to keep hunting for it.

If anyone has not found it within an hour, we'll help talk them in to the finish, where we will pose for a post-hunt group photo, and share hunt stories together.

Sound fun? It really is! Hope to see you there!

Transmitter Frequency : 146.565 MHz Simplex (3rd Harmonic 439.695 MHz)

Tuesday & Thursday Nights 10M Rag Chew Net @ 1930 Hours
28.465 MHz or 28.475 MHz

You Can Pay Your Membership Dues Using Cash, Check, Credit Card :

- **Pay your dues using our Pay Dues Here webpage**
- **Bring your money to any General Membership Meeting**
- **Bring your money to any Tech Saturday Forum**
- **Bring your money to any Saturday @ The W2MMD Clubhouse**
- **Bring your money to any Dinner @ The W2MMD Clubhouse**
- **Send your check in to our PO Box 370**

Gloucester County Amateur Radio Club
PO Box 370, Pitman, NJ 08071

The membership dues are :

- **$30.00 - Full Membership (Plus an Optional Donation)**
- **$15.00 - Family Membership**
- **$25.00 - Associate Membership (Plus an Optional Donation)**

March 31, 2025 is the deadline to renew your membership dues

Regional (Atlantic & Hudson Divisions) Hamfests & Events

February 01, 2025 : Keuka Lake Amateur Radio Association, KLARA Groundhog Hamfest, Almond Municipal Building, 1 Marvin Lane, Almond, NY. **www.klara.us**

February 01, 2025 : W2SZ Amateur Radio Club of Rensselaer Polytechnic Institute, Flea at RPI, Rensselaer Union McNeil Room, 1761 15th Street, Troy, NY. **www.w2sz.org**

February 23, 2025 : Wireless Association of South Hills Amateur Radio Club, WASHFest 2025, South Park Home Economics Building, 3735 Buffalo Drive, South Park, PA. **www.n3sh.org**

February 23, 2025 : Long Island Mobile Amateur Radio Club Hamfest & Electronics Fair, Levittown Hall, 201 Levittown Parkway, Hicksville, NY. **www.limarc.org**

HamCation 2025
February 7 - 9, 2025
Central Florida Fairgrounds and Expo Park
Orlando, FL
www.hamcation.com

GCARC TechNet ZOOM Forum

GCARC TechNet ZOOM Forum is scheduled to be available every Monday Night until December 29, 2025.

There will not necessarily be a topic scheduled every Monday Night, but the opportunity is available to schedule succeeding topics of interest on consecutive Monday Nights.

Every Monday @ 1930 Hours

Date &Forum Topic : See e-mail and website for more information

Go to : https://gloucestercountyarc.weebly.com/gcarc-technet.html
for TechNet Information Resources and ZOOM Instructions

Meeting ID : 933 9943 3123 ; Passcode : 800835
Join ZOOM Meeting Link : https://bit.ly/3K8bWwj

Tech Saturday Forum

February 08, 2025 @ 0900 Hours

W2MMD Clubhouse

Forum Topic : Overview of DMR Operation

Q & A Session About All Things Ham Radio and Socializing!

The HF Station Will Be Available For Local Operation!

Tech Saturday sessions are held at the W2MMD Clubhouse on the first Saturday of the month following the Wednesday Night General Membership Meeting and are designed to be hands-on collaborative events focused on using the Clubhouse resources to demonstrate various aspects of Amateur Radio and related technical areas. Previous sessions have covered USB software-defined radios, Raspberry Pi and Arduino devices, satellite operations and other similar topics.

We would like to invite all of our new members as well as our veteran members to our Tech Saturday Forums to help answer any questions and discuss any and all issues the new members have come across as they progress through the ***Amateur Radio Experience*.**

The Discussion Theme is a QSO starting point - a way to initiate a conversation. All Tech Saturdays are an open QSO of all subjects of Amateur Radio interest. All questions are welcome as well as a venue for hams to show off their latest ham radio projects or gadgets. Have a problem programming that HT, we can help! Not sure what radio or antenna to buy, we can help!

All Club Members who would like Clubhouse access to use its radio equipment would have to have some brief "Elmering" on the Clubhouse rules, such as using the alarm system, the A/C and heaters, the antenna system, and the radio equipment. The Club's HF station is reserved for local use on Tech Saturday.

"Ask not what your Club can do for you,
Ask what you can do for your Club"
- KA2OSV

Membership Badges Ready For Pick-up.

They can be picked up at the W2MMD Clubhouse or at the monthly General Membership Meetings

Dave Danichkin, KD2UXC
Jim Foster, W3JNF
Deirdre Hebert, AD2GQ
Ronald Jackson, KE2CJB
Bob Jensen, KC3WWL
Ben Johnson, NE2R
Calvin Keller, N2YMS
John McGonigle, KC3ZJX
Jack Snyder, AI2D

Constitution Changes

By Ron Block, NR2B

After the rewrite of the Constitution two years ago, it was hoped that it would remain unamended for a while longer. However, that is not the case. The ARRL has been streamlining their processes and when it comes to money handling their change impacts our document. The Constitution Committee is hereby proposing three changes, only one is directly related to the ARRL, and all of which are in Article II, *Officers, Directors, Trustees and their Duties*. They are as follows :

Constitution Committee
Chris Prioli, AD2CS
Jim Wright, N2GXJ
Jeff Garth, WB2ZBN
John O'Connell, K2QA
Karl Frank, W2KBF
John Zaruba, K2ZA
Ron Block, NR2B

- **ARRL License Fee Processing**
- **Miscellaneous Clean-up**
- **Signature Authority**

ARRL Licensing Fee Processing (2025-01)

The ARRL is in the process of improving its licensing testing process by moving to an all-electronic system. Not only is the license testing taken on a computer, but the processing of the test fee will also be handled electronically. To accomplish this our Club will need to establish a bank account that is accessible by both the Volunteer Examiner Liaison (an appointed Club member) and the ARRL.

The following shorthand will be used to reference the paragraphs in the Constitution : II(1)A refers to Article II, Section 1, Subsection A.

II(1)A, President : Adds a Club member to be the *Volunteer Examiner Liaison* to the list of Standing Committees.

II(1)D, Treasurer : Add a paragraph to the Treasurer's responsibility to separately manage the license funds :

- Separately, the Treasurer shall maintain a bank account for Volunteer Examiner Liaison licensing fee collection and disbursal which shall not be comingled with other Club funds. The Treasurer shall authorize the Volunteer Examiner Liaison to disburse any balance due from each session to the Volunteer Examiner Coordinator (VEC).

II(5), Volunteer Examiner Liaison : A new section, causing subsequent section renumbering, defining the role of the *Volunteer Examiner Liaison* :

- The Club Volunteer Examiner Team shall be associated with the ARRL or other federally accredited Volunteer Examiner Coordinator (VEC). The appointed Volunteer Examiner Liaison must meet all requirements as specified by current policies of the ARRL-VEC or other federally accredited VEC.
- The appointed Volunteer Examiner Liaison shall be responsible for coordinating Club sponsored license testing, the collection of required fees, and the depositing of same into the Treasurer-designated bank account.
- The Volunteer Examiner Liaison shall identify to the Treasurer what portion of the collected fees are to be used to cover expenses as permitted by current VEC policies and authorize the release of funds due the VEC.
- The Volunteer Examiner Liaison shall maintain all records and reports required under the guidelines of the VEC and in accordance with Section 6(F).

Constitution Changes - Continued on page 10

Constitution Changes - Continued from page 9

II(6)G, Volunteer Examiner Liaison Records : A new Subsection identifying the *Volunteer Examiner Liaison* records retention :

- The Volunteer Examiner Liaison shall be responsible for providing any records as identified in Section 7, Records Retention, to the Senior Trustee for retention on at least a quarterly basis.

II(7), Records Retention : The addition of the *Volunteer Examiner Liaison* records retention requirements to the Records Retention table.

Miscellaneous Clean-up (2025-02)

II(1)A, President : While creating the change above, two errors were recognized in the list of Standing Committees. There corrections are as follows :

- Club Site is changed to Clubhouse.
- The Nominations Committee has been eliminated as a Standing Committee since it is handled elsewhere in the Constitution.

Signature Authority (2025-03)

Occasionally it is appropriate and necessary for the Treasurer's name to appear as the payee of a check created by the Treasurer. To avoid the Treasurer signing a check to himself, the following changes are proposed.

II(1)A, President : Additional text (bold) has been added to the paragraph.

- The President shall be able to sign checks drawn upon the CLUB's accounts only when the Treasurer is unable to perform his/her duties **or when the Treasurer is the payee of the check**.

II(1)D, Treasurer : Additional text (bold) has been added to the paragraph.

- The Treasurer shall sign all checks drawn upon the CLUB's accounts except as noted in **Article II, Section 1 Subsection A and as noted in this Subsection**.

Constitution Change Process

The Constitution change process requires that the proposed change shall be provided to each Club member. The publication of this article meets that requirement. The next requirement is that the change be read at two consecutive General Membership Meetings. This will be done on February 5th and March 5th. At the conclusion of the second reading, we will vote on each of the changes. The proposed change will be adopted if seventy-five percent of the voters are in favor of the change.

So you find our website confusing, can't find anything, Well So Do I!!

I have created a page *(What, Not Another Page!!)* called "Quick Links"

On this page you will find "Buttons" to some the most popular pages
I will add more as time goes on, but I hope this helps your journey navigating through your Club Website!
https://gloucestercountyarc.weebly.com/quick-links.html

GCARC Monthly VE Exam Testing Summary - January 09, 2025

By Chris Prioli, AD2CS

The regular monthly VE session was held on 9 January at the W2MMD Clubhouse. There was one single exam candidate who was attempting to earn a Technician (Element 2) license. The session was attended by a total of 10 GCARC Volunteer Examiners. The Team Liaison for this session was **Chris Prioli ADCS**.

The candidate, who will remain unnamed at this point, did not successfully complete the Element 2 requirements, and was therefore not granted a license.

For the first time, the VE Team proctored an exam session using completely electronic methodologies. This means that the candidate completed the exam online, and that all grading and submissions were done online as well.

The GCARC VE Team that proctored the exam session included the following Volunteer Examiners :

- **Gary Reed, N2QEE**
- **Mike Resnick, N2WOQ**
- **Rich Subers, W2RHS**
- **Greg Ciraula, K3GC**
- **MaryLu Ciraula, K3MLC**
- **Earl Moore, KC2NCH**
- **Court Smith, KD2SPJ**
- **Mike Thompson, KG4JYA**
- **Steve Farney, W2SEF**
- **Chris Prioli, AD2CS**

Jerry Barnish K2EAB was also on site and assisted, though he was unable to participate as a full VE due to an unresolved computer software problem with the FCC and the new ExamTools system.

The next regularly-scheduled VE session will be held on 13 February 2025 at 1900 hrs at the W2MMD Clubhouse, as usual. The VE team will be using the new ExamTools system to its fullest capability, within our current technological means.

It is important to note that all test candidates going forward will be advised, whenever possible, to pre-register and pre-pay for the exam online. Specifics of that process will be forthcoming on the GCARC website as soon as possible.

Monday & Thursday Night 40 Meter Net @ 1930 Hours
7.225 MHz (+ / - 5 or 10 kHz)
NCS : Jim Clark, KA2OSV

W2MMD

www.facebook.com/W2MMD

twitter.com/w2mmd_gcarc

Facebook

Promotional Special for Ham Exam Classes

By Chris Prioli, AD2CS

Great news! For the next two sessions of the GCARC Ham Exam Preparation Classes, in celebration of our upcoming 10th session, we are offering a promotional incentive program in the hopes of enrolling some additional students for the sessions.

One of the stumbling blocks that seems to have cropped up lately is attrition in the student body during class sessions. In the last class session, all of the Element 2 (Technician) students had dropped out of the program before completing the job, and therefore did not earn a ham license. I am hoping that I can reverse that trend, and maybe even entice some additional students to sign up, in all Elements.

Towards that end, and for Session IX and Session X only (at this point), GCARC will reimburse the $15.00 test fee to any student exam candidate who successfully completes the training program and succeeds in passing the exam for the studied element in the first test sitting. The rules are as follows :

1. This promotion is valid only for Session IX (Spring 2025 session) and Session X (Fall 2025 session)
2. To qualify for the exam fee reimbursement, the student must
    A. Be present for at least eight of the ten classroom meetings
    B. Actively participate in the classroom training portion of the session
    C. Successfully pass the FCC exam for the Element studied in the class at the first formal attempt
3. This promotion applies to all Elements
4. Reimbursement is limited to one per individual student exam candidate per session
5. If a student exam candidate chooses to attempt multiple Elements during the same session with testing events on different dates, only one of the exam fees will be reimbursed upon successful completion
6. If a student exam candidate taking an exam for a given Element passes that exam and then opts to attempt the next Element's exam during the same exam event, reimbursement will be made without regard to the outcome of the additional Element exam attempted
7. Reimbursement will be made via bank check issued by the GCARC Treasurer upon inclusion of the new license status in the FCC ULS database
8. Total reimbursement, which includes any reimbursement from other sources, will in no case exceed the maximum $15 fee charged for the exam
    A. In the event of a youthful candidate who receives the ten-dollar fee reimbursement from ARRL, the GCARC reimbursement will be limited to the five-dollar difference between the total exam fee and the ARRL reimbursement

For information regarding scheduled session dates, please refer to the License Classes page on the GCARC website **(https://gloucestercountyarc.weebly.com/license-classes.html)**, or on page 50 of this issue of CrossTalk. Answers to any questions that may arise can be had via an e-mail to me at the email address on the GCARC roster.

"Dinner @ The W2MMD Clubhouse"
Wednesday, February 26, 2025 @ 1800 Hours
W2MMD Clubhouse

Gloucester County Amateur Radio Club
YouTube Channel
https://www.youtube.com/@W2MMD

Thank you to the Club members who authored CrossTalk articles in 2024 (in no particular order) :

Jon Pearce, WB2MNF
Ron Block, NR2B
Gary Reed, N2QEE
Jim Wright, N2GXJ
Chris Prioli, AD2CS
Bill Mollenhauer, N2FZ
Bob Keogh, KD2NEC
Bill Szkromiuk, W4WCS
Glenn Dougherty, N2YIO
Marc Federici, WM2Y
Todd Foster, W2TEF
Joe Lee, N2BNJ
Ella Lee, K2BNJ
Art Strong, KA0WS
Sheldon Parker, K2MEN
Bob Pantazes, W2ARP
Karl Frank, W2KBF
Darrell Neron, AB2E
Stan Slachetka, WA2JRZ

Thank you to the Club members who participated in Fox Hunts in 2024 (in no particular order) :

Greg Ciraula, K3GC
Marylu Ciraula, K3MLC
Mike Resnick, N2WOQ
Court Smith, KD2SPJ
Jerry Barnish, K2EAB
Marc Federici, WM2Y
Al Arrison, KB2AYU
Alex Duboski, KB2YEF
Sheldon Parker, K2MEN
Bruce Canino, KD2LBU
Earl Moore, KC2NCH
Jim Wright, N2GXJ
Karl Frank, W2KBF
Jim Beury, KE2DRN
Ron Block, NR2B
Angela Metzger, KE2DRJ
Aimée Ortiz, K9RVT
Frank Romeo, N3PUU

Need a ride to a Club meeting, event, or activity?

Just send a message to the Club's e-mail reflector asking if a member can pick you up

GCARC <*at*> MAILMAN <*dot*> QTH <*dot*> NET

All Club members have access to this FREE e-mail service

NTS Resources

The National Traffic System® (NTS) is a network of Amateur Radio operators who move information during disasters and other emergencies. General messages offering well wishes also move through the NTS to help test the system and to help Amateur Radio operators build traffic handling skills. While the NTS is primarily set up to serve the United States and Canada, it is possible to move traffic internationally through the NTS through various local, regional, area, and international network connections.

- **NTS 2.0 : https://nts2.arrl.org**
- **NTS Manual : https://www.arrl.org/nts-manual**
- **NTS Methods and Practices Guidelines Table of Contents : https://www.arrl.org/table-of-contents-nts-methods-and-practices-guidelines**
- **Handling Instructions : https://nts2.arrl.org/hx-handling-instructions**
- **Numbered Texts : https://nts2.arrl.org/numbered-texts**
- **Form Encoding Rules for Form : https://nts2.arrl.org/form-encoding-rules-for-forms**

DAs and DITs

>> The former employees of **All Electronics** have formed a new electronic surplus store called **Aretronics : https://aretronics.com**

>> **Ben Johnson, NE2R**, report on the **Historic Transatlantic Radio Project** : **https://youtu.be/-z5O1LHEFlc?si=pIZxw3KN78xFWPs5**

>> **New SNJ Section Manager, Ron Fish, KX1W**, has set up a Groups.IO e-mail service for the SNJ Section. You can sign up at : **https://groups.io/g/ARRLSouthernNewJerseySection**

>> **On-line Baofeng HT Settings : https://hamencounters.com/201807/baofeng-handheld-settings**

>> **Dr. Becky Grady, KN6WDQ**, has penned a ham radio lullaby titled ***"I Pinged the Moon"***. You can listen to her lullaby on YouTube : **https://youtu.be/Y6NB6L9DUak?si=qqfEYAk2aaqz8Ac7**

Friday
February 14, 2025

Gloucester County Amateur Radio Club Elmers

We are still looking for some more Club Elmers. If you would to add your name to the Elmer's List, send your specialty to w2mmdgcarc@gmail.com. Here is what we have so far :

- **Tony Starr, K3TS : Antenna Construction; Contesting; CW Help and Training**
- **Ken Bozarth, KN2U : Antennas**
- **Jeff Welsh, KD2AZI : Boat Anchor Repair & Operation; Raspberry Pi; Arduino; Python; POTA; Mobile Installation & Operating**
- **Karl Frank, W2KBF : Digital Messaging (FLDIGI, WinLink)**
- **Lenny Rust, W2LJR : DMR Radios & Programming**
- **Ron Block, NR2B : Lightning protection & grounding**
- **Chris Prioli, AD2CS : Kit Building; Antenna Building; Radio Programming; PC and Electronic Troubleshooting; Ham Radio Licensing & Studying**
- **John Zaruba Jr, K2ZA : Yaesu System Fusion Radio Programming; POTA; SOTA; CW Learning & Operating**
- **Jerry Barnish, K2EAB : Radio Astronomy**
- **Mike Thompson, KG4JYA : Radio Astronomy; VARA (HF and FM); WinLink**
- **Steve Farney, W2SEF : WSJT-X; FT-8; LoTW; TQSL; Grid Square**
- **Carl Wittig, N2CRW : Audacity® Audio Editor**
- **Gary Mirkin, WA3SVW : FLDIGI; MMSSTV**
- **Jon Pearce, WB2MNF : Satellite Communications**
- **Frank Romeo, N3PUU : Toilet Installer; Jack-Of-All Trades - Master Of None**
- **John Hill, W2HUV : Local & Remote W2MMD HF Station Operation; Training & Support**
- **Dave Sheppard, W2PAX : National Traffic System**

Tech Saturday Forum : John Zaruba Jr, K2ZA On Learning CW

By Jon Pearce, WB2MNF

At the January 11th Tech Saturday Forum, **John Zaruba Jr, K2ZA** presented an insightful session on learning Morse Code, also known as CW. The session delved into various aspects of Morse Code learning, making it an enriching experience for all attendees.

John began by explaining how the brain comprehends different sounds, emphasizing that listening to CW at high speeds is the most effective way to learn it. This approach helps the brain to recognize and process the sounds more efficiently, leading to quicker mastery of Morse Code.

Throughout the session, John introduced several tools designed to aid in learning CW. He highlighted the importance of having a code buddy, someone with whom you can practice learning the code together. This collaborative approach not only makes the learning process more enjoyable but also enhances retention and understanding.
In addition to discussing tools and approaches, John showcased several websites that are particularly useful for learning Morse Code. These online resources provide a wealth of information and practice opportunities, making them invaluable for both beginners and advanced learners.

To make the session even more interactive, John brought along several devices that are useful for practicing sending CW. These hands-on demonstrations allowed attendees to get a feel for the equipment and understand its practical applications. Overall, the Tech Saturday event was a great success, thanks to John Zaruba's expertise and engaging presentation. Attendees left with a deeper understanding of Morse Code and valuable resources to continue their learning journey.

K2ZA'a presentation can be viewed at : https://gloucestercountyarc.weebly.com/learn-morse-code.html

The Education Connection

By Chris Prioli, AD2CS - chris@ad2cs.com
www.ad2cs.com

February 2025

As I write this, it is the morning of the first meeting of the NanoVNA exploration class that is being held at the Clubhouse tonight (21 January) and on Thursday evening, 23 January. As luck would have it, all available seats for this program were sold, so it should be a great pair of educational sessions.

The participants will be receiving a variety of hardware items for use in the classes, as well as some printed materials that will help them as they go on their own in using the NanoVNA. This brings up an important concept of which all of you should be aware.

We often hold these educational classes, but we impose a modest fee for the class. It is important that the membership understands that the fee, in most cases does not really cover all of the costs involved, and this class is a prime example of that. Consider all of the items that the participants will receive :

- **A custom-made filter board**
- **A standard NanoVNA RF demonstration board with (2) SMA x IPEX cables**
- **A pair of 12” RG-174 SMA-M x dual alligator clip test leads**
- **A pair of SMA thumb wrenches**
- **A 12” RG-316 SMA-M x SMA-M test cable**
- **An untuned ground-plane antenna**
- **Some printed materials**

Now… the cost of all of that material is quite obviously more than the fifteen dollars charged for the class. So, who pays for the rest? In this case, I do, as I decided to incorporate more hands-on exercises than I had originally planned for when setting the class price. Some of the materials provided were constructed from supplies that I have on hand at all times, such as SMA connectors, RG-174 cable, alligator clips, test lead wire, and hook-up wire. Some of the items were donated to me by another Club member who does a lot of 3-D printing for me. The salient point is that these classes are great values for the price charged. There is almost always more that goes into these programs than is covered by the amount charged.

That begs the question, ***“Why isn’t a price charged that would cover all of the costs?”*** The answer to that has already been explained above - plans sometimes change! Our goal is to provide the best experience at the lowest possible cost, and we do not use educational activities as fund raisers.

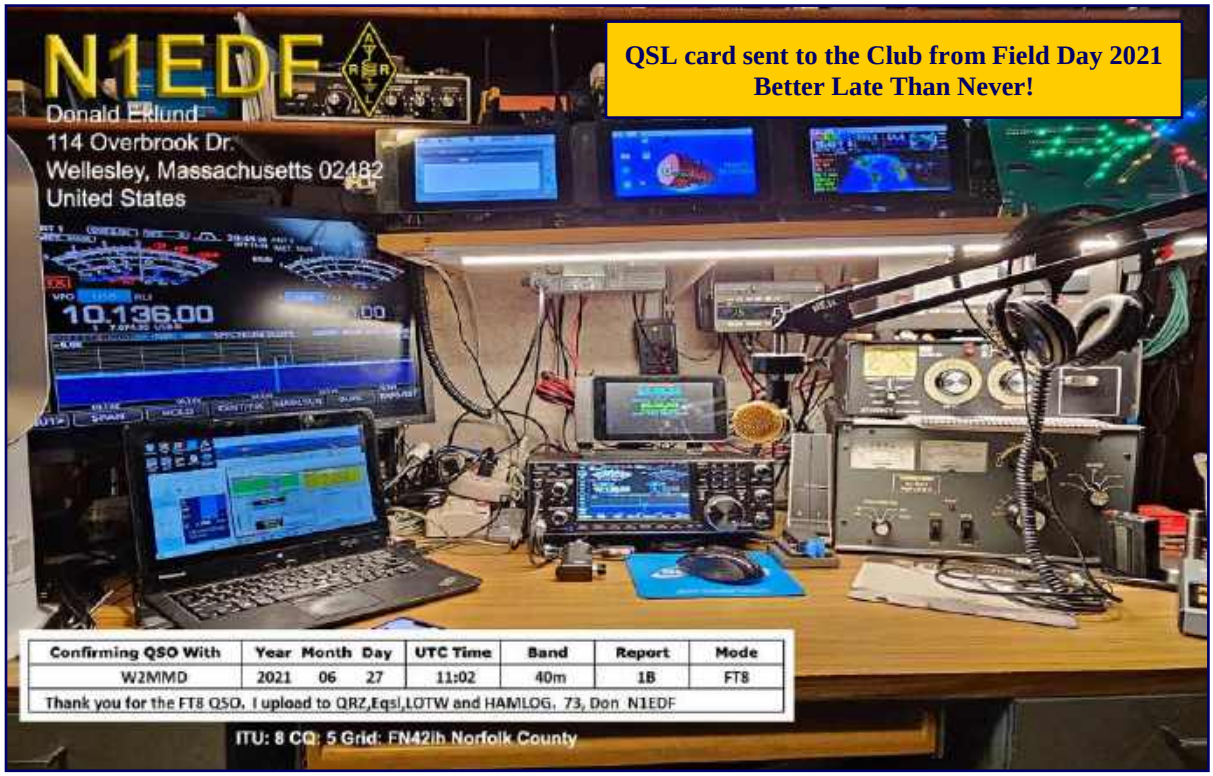
Enough about that. Now let’s talk about another topic…the upcoming GCARC Ham Exam Preparation Classes Session IX, slated to kick off with the Element 2 group on Monday, 31 March 2025. There are still plenty of seats available, for all three Elements. If you have been putting off that upgrade to General or to Amateur Extra, put it off no longer. ***Now*** is the time to enroll in one of our license classes. Remember too, that for this and the next session, GCARC is rebating the $15 (fifteen dollar) ARRL test fee to those students who attend at least eight of the weekly classes, and then pass the exam on the first attempt. This promotion will ***not*** last forever so take advantage of it ***now***. Complete rules for this promotion are published on page 12 of this issue of CrossTalk.

Education Connection - Continued on page 17

Education Connection - Continued from page 16

Anyone who is interested in attending a licensing class, please visit the ***License Classes*** page of the GCARC website **(https://gloucestercountyarc.weebly.com/license-classes.html)** and complete the enrollment form found there. Submit the form and I will receive it in my email inbox. Then, go ahead and pay the registration fee of $35 by submitting that amount to ***education@w2mmd.org*** via PayPal. Doing so will hold your seat in the class of your choice.

That's it for now…See you next month!


N1EDF
Donald Erlund
114 Overbrook Dr.
Wellesley, Massachusetts 02482
United States
10,136.00
Confirming QSO With | Year | Month | Day | UTC Time | Band | Report | Mode
W2MMD | 2021 | 06 | 27 | 11:02 | 40m | 1B | FT8
Thank you for the FT8 QSO. I upload to QRZ,Eqsl,LOTW and HAMLOG. 73, Don N1EDF
ITU: 8 CQ: 5 Grid: FN42ih Norfolk County

QSL card sent to the Club from Field Day 2021
Better Late Than Never!

ADIF Logs Wanted When Operating As W2MMD @ The Clubhouse

By Jim Wright, N2GXJ - Contact me via e-mail on Club Roster List

It is a common courtesy in ham radio to be able to QSL 2-way contacts made with other hams. We're pretty good about doing this for our field day contacts made each year, but are falling behind in this for contacts we make from the Clubhouse as W2MMD.

So here is the ask :

If you operate from the Clubhouse as W2MMD (e.g. on HF, UHF/VHF, or on Satellite, at Tech Saturday, or during contests or other), please email me the electronic log entries in ADIF format from the logger program you used for those contacts?

That way, just like I do following field day each year, I can get them uploaded to LOTW and to eQSL to offer the courtesy of an electronic QSL to those who make contact with us as W2MMD here in NJ.

Thank you

GCARC's 2024 Year In Poetry

By Google NotebookLM

In twenty twenty-four, the GCARC took flight, A year of growth, of learning, shining ever so bright. A year of growth, of learning, and of doing, Their passion for radio, constantly renewing.

A **balloon launch**, a journey to the sky, Soaring over **22,000 feet**, reaching for the high. A radio signal sent, a testament to skill, Into the ocean it fell, fulfilling its will.

The Club's membership, a record to attain, **Two hundred thirty strong**, a vibrant domain. **Chris Prioli's** classes, new hams they did bring, To the joy of radio, making hearts sing.

From near and far, the members all came, Drawn by the Club's spirit, and its growing fame. **Field Day** they celebrated, a yearly tradition, And various interests, with great ambition.

The **W2MMD Clubhouse**, a hub for all to meet, Where projects were built, and knowledge shared, oh so sweet. **New towers** were planned, and the grounds made neat. A **VHF tower base** was repaired, a structure complete.

Tech Saturdays flourished, with topics diverse and grand, From **VOIP** to **Meshtastic**, with skills at hand. **Antenna building** and tuning, a practical art, With **SDRs and antenna modeling**, playing a key part.

The **10-meter and 40-meter nets**, a regular call, Connecting members, standing strong and tall. The **Hamfest** drew crowds, a spectacle so grand, While **Fox Hunts** tested skills, across the land.

Finances were managed, with careful thought and care, Balancing income, and expenses to bear. **Emergency communications**, a duty they embrace, With ARES training, they set the pace.

Seeking new members, they tried a new track, "Hacking" they called it, for the younger pack. **Balloons they launched at Woodruff School**, with STEM in their sights, Inspiring the students, and filling them with lights.

An **EME station was built**, a contact they did seize, **Moonbounce achieved**, bringing the team to ease. **SSTV images from the ISS** captured with pride, Showing the Club's achievements, far and wide.

With passion and purpose, the GCARC did soar, In **twenty twenty-four**, and forevermore. They built a strong community, that will always endure, Amateur Radio's future, forever pure.

Tuesday AfterNoon Net @ 1200 Hours

Net Control Stations :
Steve Farney, W2SEF; Rich Subers, W2RHS,
Greg Ciraula, K3GC; & Jeff Garth, WB2ZBN

147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

Here is the schedule for the upcoming weeks

Greg Ciraula, K3GC : February 4, 2025
Steve Farney, W2SEF : February 11, 2025
Rich Subers, W2RHS : February 18, 2025
Jeff Garth, WB2ZBN : February 25, 2025

Greg Ciraula, K3GC : March 4, 2025
Steve Farney, W2SEF : March 11, 2025
Rich Subers, W2RHS : March 18, 2025
Jeff Garth, WB2ZBN : March 25, 2025

Greg Ciraula, K3GC : April 1, 2025
Steve Farney, W2SEF : April 8, 2025
Rich Subers, W2RHS : April 15, 2025
Jeff Garth, WB2ZBN : April 22, 2025
Steve Farney, W2SEF : April 29, 2025

If you would like to be a Net Control Station for this net, please contact Steve Farney, W2SEF

Thursday Night Rag Chew Net @ 2000 Hours

Net Control Stations :
Mary Delemarre, W2TDS; Gary Mirkin, WA3SVW;
Steve Farney, W2SEF; & Jeff Garth, WB2ZBN

147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

Here is the schedule for the upcoming weeks :

Steve Farney, W2SEF : February 6, 2025
Mary Delemarre, W2TDS : February 13, 2025
Gary Mirkin, WA3SVW : February 20, 2025
Steve Farney, W2SEF : February 27, 2025

Jeff Garth, WB2ZBN : March 6, 2025
Mary Delemarre, W2TDS : March 13, 2025
Gary Mirkin, WA3SVW : March 20, 2025
Steve Farney, W2SEF : March 27, 2025

Jeff Garth, WB2ZBN : April 3, 2025
Mary Delemarre, W2TDS : April 10, 2025
Gary Mirkin, WA3SVW : April 17, 2025
Steve Farney, W2SEF : April 24, 2025
Jeff Garth, WB2ZBN : May 1, 2025

If you would like to be a Net Control Station for this net, please contact Jeff Garth, WB2ZBN

Gloucester County Skywarn Net

The Gloucester County Skywarn Net is held every Sunday @ 1930 Hours on the 147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

All Are Welcome To Participate

Net Control Stations : Steve Bromhead KB2RTZ, Charlie Wahl, KC2STO, & Jeff Garth WB2ZBN

Gloucester County ARES Net

The Gloucester County ARES Net is held every Sunday @ 2000 Hours on the 147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

All are welcome to participate

Net Control Stations :
Steve Farney W2SEF, Bob Keogh KD2NEC, Karl Frank W2KBF, Al Arrison KB2AYU, Gary Mirkin WA3SVW, Greg Ciraula, K3GC & Todd Woodward KD2ESH

Todd Woodward KD2ESH : February 2, 2025
Bob Keogh KD2NEC : February 9, 2025
Steve Farney W2SEF : February 16, 2025
Greg Ciraula, K3GC : February 23, 2025

Anyone who is interested in joining the Gloucester County ARES Team, is invited to contact Bob Keogh at KD2NEC @ QSL.NET

ARRL Learning Center

https://learn.arrl.org

Discover how to make Amateur Radio your own.

Online courses from the ARRL Learning Center provide ARRL members with additional instruction and training for getting on the air, emergency communications, and electronics and technology

Current Website Updates : Go to this page to find out the latest changes & updates on our W2MMD Website

https://gloucestercountyarc.weebly.com/current-website-updates.html

At The Repair Bench…

A monthly column describing a recent repair bench event.

By Chris Prioli, AD2CS - chris@ad2cs.com - www.ad2cs.com

Heathkit® IT-3121 Curve Tracer - February 2025

Every now and then, a piece of equipment comes in as an unsolicited repair job, wherein the owner has been directed to me either by a friend, another ham, or via my website, **www.ad2cs.com**. This was one of those cases, where a friend of a friend sent this guy to me. He shipped an older (circa 1980) **Heathkit® IT-3121 Semiconductor Curve Tracer** for repair if possible. I sort of chuckled at that last caveat - ***"if possible"*** - because to my way of thinking, anything is repairable, but it may not always be practical or cost-effective to do so. There is almost always a method by which an older piece of equipment can be made operational again, if the owner wants to spend the ***"do-re-mi"*** that it would take.

In the situation at hand, this was a piece of test apparatus that would not operate as intended. The specific complaint was that although the pilot light would illuminate, there was no output from this unit when connected to an oscilloscope.

A brief explanation is called for here. This tester is actually a ***curve tracer adapter*** rather than a full curve tracer in its own right. This device is designed to apply the operational voltages and current to the semiconductor ***device under test (DUT)***, and then to process the output into usable input signals for display on an oscilloscope. The oscilloscope connections for both X and Y (horizontal and vertical) are on the rear panel of the IT-3121. The owner's complaint was that he was getting no output to the oscilloscope when the DUT was installed to the banana jacks used as the test jacks on this unit.

A quick look at the schematic revealed that the IT-3121 has two separate internal power supplies, one of which is identified as the low-voltage supply, leaving the technician to assume that the opposite supply (***the sweep supply***) is a high-voltage supply. In fact, that supply provides output voltages as high as 200 volts. It also supplies AC to the neon lamp used as the pilot lamp, which tells part of the story of this unit.

The fact that the pilot lamp was working simply meant that the incoming line voltage, the power switch, the main fuse, and the transformer primary winding were all intact, and it indicated that the HV supply secondary was also intact. This shifted my focus to the low-voltage power supply in the search for the problem. Some voltage measurements showed that there were definitely some problems in the low-voltage supply. Specifically, the +5VDC, +15.5VDC, and -16.1VDC supplies were all missing. In fact, the only low-voltage supply that seemed to be present was the -15.5VDC supply.

At The Repair Bench - Continued on page 22

At The Repair Bench - Continued from page 21

A look at the schematic in this area **(Figure 2)** showed some likely candidates, so I set about taking some more measurements. The positive output of the full-wave bridge rectifier (or the collector of transistor Q13) should have measured about +22 volts, but this point in fact measured zero volts, meaning it was grounded. The most likely candidate here was the 200µF/25V axial electrolytic capacitor C5, whose job is to smooth the pulsating rectifier output somewhat. I opened this capacitor circuit, and voltage was restored at the Q13 collector. Replacing that shorted capacitor restored both the +15.5VDC and the +5VDC supplies. I used a 50-volt rated capacitor as the replacement - more about why shortly.

Figure 2 : Heathkit IT-3121 Sweep Supply

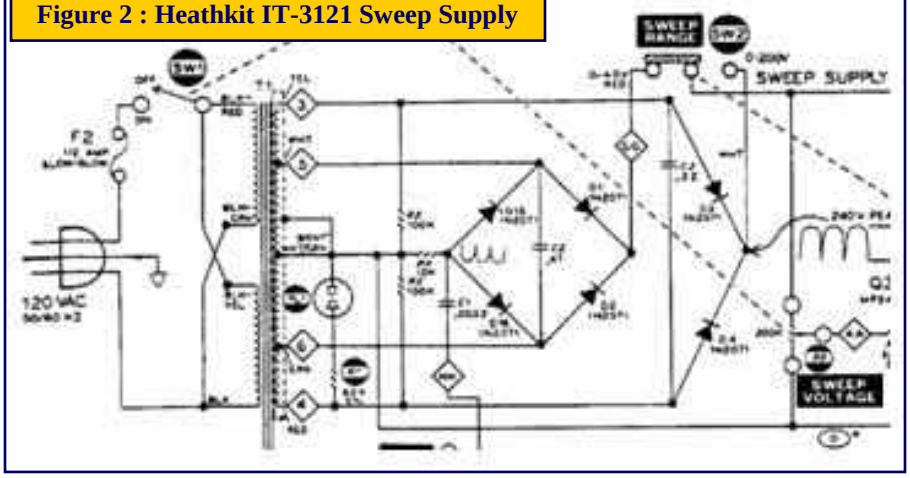
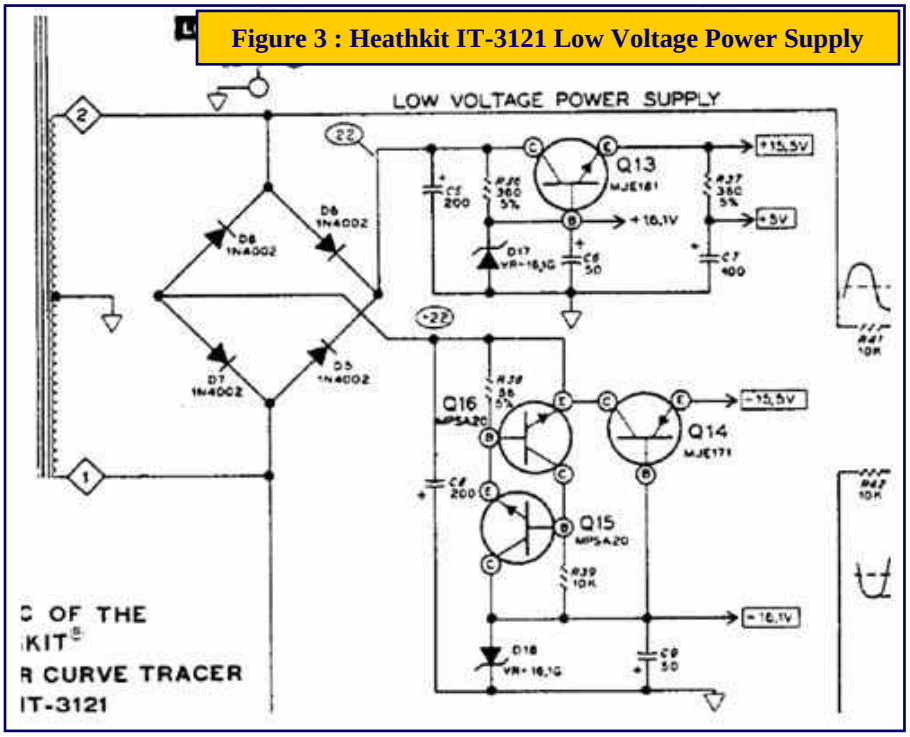


Figure 3 : Heathkit IT-3121 Low Voltage Power Supply



Now for the -16.1VDC supply. In this case, I began by measuring the voltage at the collector of transistor Q15, and once again found it to be 0VDC, indicating that it was grounded and that Zener diode D18 was effectively bypassed. Once again, we were looking at a shorted capacitor, in this case, the culprit was the 50µF/25V axial electrolytic capacitor C9. As before, replacing the shorted capacitor resulted in the -16.1VDC supply coming back to life.

This entire unit uses only nine polarized capacitors, all aluminum electrolytics. There are four 10µF/25V radial types (C11, C12, C13, and C14) - all in the step generator circuit. There are two of the 200µF/25V axial types, one in each of the two low-voltage power supply sections, the positive supply and the negative supply. There are two of the 50µF/25V axial types, again one in each of the two low-voltage power supply sections, and finally one rated 100µF/35V, placed in the +5VDC part of the positive low-voltage power supply. Based on the age of this unit and therefore the associated ages of these electrolytic capacitors, I decided that it was worth replacing all of them with new.

Note that the 200µF capacitors were rated 25V, and are used in ±22VDC circuits. Depending upon specific component tolerances and actual line voltage levels, these capacitors may have been operated at a point in excess of their rated voltage limits. For this reason, I elected to upgrade these capacitors to 50-volt types instead of the original 25-volt rating. In fact, in all cases, the working voltages of the capacitors were increased, partly due to smaller modern component sizes and my desire to keep the components of the same approximate physical size so that they fit the PCB placements properly.

At The Repair Bench - Continued on page 23

At The Repair Bench - Continued from page 22

With all of the capacitors replaced, I did a quick clean-up of the unit, and then I put it through some actual-use testing to verify its functionality. All was as it should have been, so I called this job ***"done!"***

This was one of those simple jobs that come in occasionally, and it is one that was extremely easy to diagnose so long as one thinks through the conditions. What works? What doesn't work? How is that condition verified? Then, finally, what could cause that problem? Think it through, evaluate the schematic, check your thinking with a multimeter, and it's all over.

Operating Tip - Caution : Software Updates before a Contest
In today's world of self-updating computers, be mindful of changes to your configuration that may inadvertently happen when software is upgraded. Microsoft Windows can change port assignments, sound devices, and so forth after updates, which could make radio control problematic. Updates to any software involved in your contest operation should be treated with caution just before a contest starts. A prudent person might spend a half hour before the contest verifying that everything is operating as it should be.

Spotlight - Dave Sheppard, W2PAX

I grew up around amateur radio as my grandfather, the original W2PAX (Gurdon Cooper - GCARC President 1966), was an active amateur for over 60 years. While I regret procrastinating not getting licensed until 2009, fortunately my grandfather was able to see me get my ticket. When I upgraded to General in 2015, I took his call as a vanity.

I've been involved with traffic handling since late 2016. One of our local VHF traffic net control stations at the time was very proficient and made the net enjoyable and welcoming. Eventually, I took a chance at handling traffic. About two years later, I became net manager of the Southwest Florida Traffic Net. In 2019, I joined our SSB traffic nets in Florida, as well as becoming a digital traffic station. In 2022, I was appointed the Section Traffic Manager for the Southern Florida Section. My STM appointment was "trial by fire," as it happened as a major hurricane was making landfall and the section was fully activated. I am also an Official Relay Station and an Assistant Emergency Coordinator for Lee County, Florida.

As a former volunteer first responder from New Jersey, I feel a commitment to EmComm and the NTS role in supporting our served partners. Activating during two major hurricanes in as many years has been an amazing learning experience in station preparedness and making sure our section NTS resources are staffed and available.

I encourage outreach to local VE teams and clubs. Building interest in the NTS on the local level has proved incredibly successful in our area. With the help of our local group of regular traffic handlers in southwest Florida, we've developed a half-day training program that we present at least annually in the region. We're looking to expand that training program into the other portions of our Section in 2025.

When not on the air with traffic handling, you can find me on FT8 or SSB on the bands. I've spent 30 years in the land surveying profession, and currently work for a national civil engineering and land surveying firm. My wife Jennifer and I have lived on the fringe of the Everglades in Collier County, Florida, for the last 24 years. - Dave Sheppard, W2PAX

Article Credit : ARRL NTS Letter for December 3, 2024 - www.arrl.org

Amateur Radio Emergency Services - February 2025
Resources - News - Updates

By Bob Keogh, KD2NEC - kd2nec@qsl.net
Gloucester County Emergency Coordinator

Items in the Article :

- **Ham Radio Operators Serving During California Firestorms**
- **California Wildfires – Red Cross Response and Disaster Relief**

Ham Radio Operators Serving During California Firestorms

As the firestorms across Southern California continue to threaten millions of residents, trained amateur radio operators are serving critical volunteer roles to help officials spot fires before they get out of control. Dry conditions and wind gusts of up to 100 miles per hour have fueled days of devastating wildfires. Entire neighborhoods have been leveled by infernos.

Damage from the Eaton Fire. US Air National Guard Photograph by Tech. Sgt. Joseph Pagan

The Eaton fire burned to the top of Mount Wilson, a critical logistical post for broadcast radio and television stations, as well as communications across the Southland. Federal agencies, air traffic control, local emergency responders, radio amateurs, and others all share tower space on the mountain.

ARES SNJ Section News - Continued on page 25

ARES SNJ Section News - Continued from page 24

While the main fires have been burning north and northwest of the central section of Los Angeles, just to the south, hams are standing watch. **Orange County Fire Watch (OCFW - https://ocparks.com/about-us/volunteer/orange-county-fire-watch)** is a program locally organized by the Orange County Parks Department and the Irvine Conservancy. During severe fire weather, volunteers go to preassigned locations within parks and open spaces to report conditions. Many of them are hams, using the amateur radio bands to fill in mobile network weak zones.

ARRL National Instructor **Gordon West, WB6NOA (https://www.arrl.org/gordon-west?utm_source=Informz&utm_medium=Email&utm_campaign=ARRL)**, is among the deployed volunteers. He said hams are stepping up. "We're all over the **ARRL Orange Section (https://www.arrl.org/Groups/view/orange?utm_source=Informz&utm_medium=Email&utm_campaign=ARRL&_zs=ANgkm&_zl=cDJD3)** on hilltops, reporting the wind and humidity, ash seen coming down, scanning for spot fires (none so far), smoke from the LA fires, guest activity at the parks, and being a presence at trailheads with reflective vests and vehicle signs indicating Fire Watch," he said.

Ray Hutchinson, AE6H, is a retired firefighter who serves as the chief radio officer for Fire Watch. He says local clubs are key to providing the needed RF infrastructure. "Our local club, the **South Orange Amateur Radio Association (SOARA - https://www.soara.org)**, an ARRL Special Service Club, provides linked 2-meter and 70-centimeter repeaters: one high level and one coastal, for use by OCFW hams during deployments. There is a formal OCFW Net Control Station (NCS) for the entirety of these events. Radio amateurs are also ready and able to serve at evacuation centers, providing support as needed.

Members of ARRL Headquarters staff have been in touch with ARRL volunteers and other ham radio groups around the affected area, and are offering material support for any activations. "It has been a busy start to the year for ham volunteers," said ARRL Public Relations and Outreach Manager Sierra Harrop, W5DX. "Whether it's firestorms or ice storms or any other need, ARRL volunteers selflessly serve their communities. We're mindful that large-scale events like this impact the hams who are active serving," she said.

ARRL Director of Emergency Management Josh Johnston, KE5MHV, has been on calls with the Federal Emergency Management Agency (FEMA) and other served agencies, offering ARRL resources. Efforts are being coordinated locally by **Emergency Network Los Angeles (ENLA - https://enla.org)**, the Voluntary Organizations Active in Disaster (VOAD) group in Southern California.

Johnston urges hams in the affected regions to be ready to take care of themselves and their families before needing to deploy. He points to resources shared by ARRL's **Amateur Radio Emergency Service® (ARES® - https://www.arrl.org/ares)** during National Preparedness Month last September. "These are stressful events for everyone, and being a ham volunteer is really second to keeping yourself and your family safe," said Johnston.

Article Credit : The ARRL Letter for January 16, 2025 - www-arrl.org

Resilience Through Amateur Radio for National Preparedness Month

- **https://www.arrl.org/news/resilience-through-amateur-radio-for-national-preparedness-month**

National Preparedness Month : Ensuring Family Safety

- **https://www.arrl.org/news/national-preparedness-month-ensuring-family-safety**

National Preparedness Month : Station Readiness

- **https://www.arrl.org/news/national-preparedness-month-station-readiness**

National Preparedness Month : Get Involved

- **https://www.arrl.org/news/national-preparedness-month-get-involved**

ARES SNJ Section News - Continued on page 26

ARES SNJ Section News - Continued from page 25

The American Red Cross is working 24/7 with partners in Southern California to make sure people have the support they need in the face of the Palisades Fire, Eaton Fire, Hurst Fire, Lidia Fire, Sunset Fire, and Kenneth Fire.

Find Open Shelters : https://www.redcross.org/get-help/disaster-relief-and-recovery-services/find-an-open-shelter.html

If an emergency has forced you to evacuate your home, the Red Cross may be able to help.

Updated January 17, 2025

Thousands of Californians are devastated by the catastrophic wildfires that wiped out their homes, cherished mementos and even their livelihoods. With neighborhoods reduced to ash, the American Red Cross is there providing help and hope with necessities like food, shelter, emotional care, recovery planning and financial assistance.

How we've helped so far :

- Nearly **450 Red Cross responders** are working day and night to make sure people are not alone.
- Over **6,500 overnight stays** have been provided with partners, offering warmth, safety and compassion to those who have left everything behind.
- Since the fires started over a week ago, the Red Cross has provided more **than 33,000 meals and snacks** with the help of partners.
- The Red Cross has been helping procure **replacement items like eyeglasses and medications** for those who had to quickly evacuate their homes.
- Through these wildfires, we're seeing the best of humanity come together to care for one another. In fact, more than **8,000 local community members** have raised their hands to offer support to relief efforts by signing up to be new Red Cross volunteers.
- The Red Cross is working closely with local officials, government agencies and other nonprofits to coordinate relief efforts and make recovery plans. This support includes **Disaster Recovery Centers in Los Angeles and Pasadena** where people can access resources and aid from multiple organizations. Specialized task forces have been established to support immediate and long-term needs alongside community and government partners, including feeding, veteran care and long-term housing.

Financial assistance programs have been launched for all households within the wildfire perimeters, only one week after the blazes began. Financial assistance empowers families to take control of their recovery and decide their next steps by helping to replace clothing, secure new housing or offset any other critical needs.

Read stories from those affected by the fires : https://www.redcross.org/local/california/los-angeles/about-us/our-work/california-wildfires-response-january-2025.html#Stories

Red Cross shelters are open to everyone in need

Anyone who needs a safe place to stay or a warm meal can find shelter information by accessing the free **Red Cross Emergency app (https://www.redcross.org/get-help/how-to-prepare-for-emergencies/mobile-apps.html)** or by calling 1-800-RED CROSS (800-733-2767).

ARES SNJ Section News - Continued on page 27

ARES SNJ Section News - Continued from page 26

All disaster assistance is free. We don't require people to show any kind of identification to enter a shelter - just their name and where they were living before the disaster.

Red Cross shelters are open to everyone in need, regardless of race, religion, gender identity, sexual orientation or citizenship status. Pets are welcome. We do everything we can to accommodate service animals and domesticated pets comfortably in our shelters. Sometimes, depending on the situation, pets may need to be housed in a different location with support from local partners.

How to Find Help

- Many areas remain inaccessible. If you need assistance, please consider coming to a shelter.
- If you can, download the Red Cross Emergency app to find service locations or visit **https://www.redcross.org/get-help.html**
- You can also find shelters by following your local Red Cross and local emergency officials on social media, or by monitoring local news.
- If you're unable to access the information you need, call 1-800-RED CROSS (800-733-2767).

Help finding a loved one

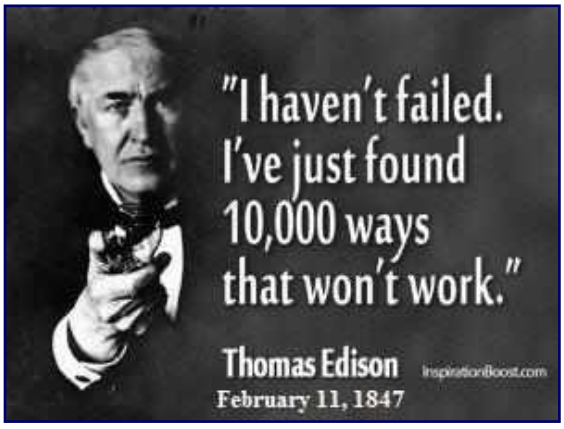
- Those needing assistance locating a missing loved one because of the fires can visit **https://redcross.org/findfamily** or reach us at 1-800-RED CROSS (1-800-733-2767). Please provide as much detail as possible to assist us in potentially locating your missing loved one.

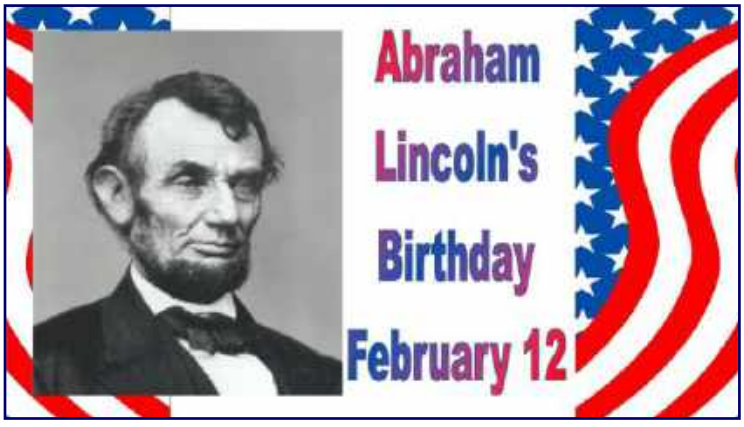
Learn more about Red Cross assistance

- Call 1-800-RED-CROSS (1-800-733-2767) - 24 hours a day
- **Download our free Red Cross Emergency App : https://www.redcross.org/get-help/how-to-prepare-for-emergencies/mobile-apps.html**

Recovering Emotionally After a Disaster - to reach out for free 24/7 counseling or support, call or text the multilingual Disaster Distress Helpline at 1-800-985-5990. Disasters are upsetting experiences for everyone involved. Children, senior citizens, people with disabilities and people for whom English is not their first language are especially at risk and are likely to need extra care and help. But everyone, even the people that others look up to for guidance and assistance, is entitled to their feelings and deserves support throughout the recovery process. Call our Disaster Distress Helpline or **https://www.redcross.org/get-help/disaster-relief-and-recovery-services/recovering-emotionally.html**

The last Major Disaster we have had in New Jersey was Hurricane Sandy in 2012, but we need to stay vigilant when it comes to Training, Drills and Exercises, in order to be prepared for any type of Emergency. If you have a desire to provide relief somewhere other than New Jersey, the Red Cross is looking for volunteers that are willing to travel outside of their home state.





Be A Club Volunteer!

Club Technical Volunteer Projects :

- **Processing monthly membership meeting and Tech Saturday videos for the YouTube channel**
- **Assisting the AV team at the Wednesday Night General Membership Meetings**
- **Assisting in the inventory of Clubhouse assets and keeping that inventory current**
- **For the more technically inclined, managing the SatNOGS station, reviewing observations, and adding new satellites to the list of those being tracked**
- **Reviewing new technologies for presentation at meetings or write-ups in CrossTalk.**

For example, the VarAC HF digital communications program has recently been updated, it is installed on the HF station at the Clubhouse, and might provide an opportunity for an interesting short article or presentation

If you would like to volunteer for any of these projects, please contact Jon WB2MNF, Ron NR2B, or Chris AD2CS

Clubhouse Construction Volunteer Projects :

Shed : Build Ramp

Clubhouse :

- **Build Ramp**
- **Replace Interior Front Door**
- **Power Wash Siding**
- **Replace Back Steps**

Lightning Protection Project :

- **Install copper strapping in Library Room**
- **Install copper strapping in VHF/UHF Room**
- **Complete grounding rod installation around Clubhouse and Towers**

Install Utilities On New Front Parking Lot Pole

Install New VHF Towers

A *Club* that goes *above* and *beyond* for their communities and for Amateur Radio, is what defines a *Special Service Club (SSC).*

They are the leaders in their Amateur Radio communities who provide active training classes, publicity programs, and actively pursue technical projects and operating activities.

GCARC has been an ARRL Affiliated Club since February 1960 and an SSC since April 2010.

Club Member	DMR ID
W2MMD Clubhouse	**3198604**
Michael Andrescavage, N2ICV	3134044
Lance Appel, KE2UC	3200487
Alex Calabrese, WA2ADS	3100583
Chuck Capasso, WB2PGE	3169781
Matthew Carango, N3QB	3169432
Todd Cecilio, KA2YNT	3169458
Anthony Cerami, N2OAC	3202759
Mark Clark, N3QMJ	3102110
Norm Coltri, K2NRC	3183851
Holden Correia-Fisher, KD2JPV	3104911
Mike Covaleski, N2MMC	3134855
Walter Coward, WX2E	3166863
Bob Demola, KD2GFL	3134319
Doug Dersch, KD2VQA	3193630
Thomas Distelcamp Sr, KC2GYC	3110869
Glenn Dougherty, N2YIO	3161836
Adam Duncan, W3DUN	3202691
Herb Dyer, KT2Y	3134907
Harry Elwell, AD5TT	3128498
James Foster, W3JNF	3142117
Karl Frank, W2KBF	3146716
Glen Guenther, KE2BUO	3202079
Melissa Guenther, KE2BWZ	3202496

Club Member	DMR ID
Deirdre Anne Hebert, AD2GQ (AB1ST)	3133330
Chuck Lanard, KD2EIB	3134298
Gary Mirkin, WA3SVW	3165494
John Murrow, KD2NHK	1134122
Phil Nunzio, WA3RGY	3134336
John O'Connell, K2QA	3110610
Robert Pantazes, W2ARP	3157208
Jonathan Pearce, WB2MNF	3163415
Michael Pecorini, K2MRP	3132996
Michael Pentimall, KC3VTF	3203601
John Price III, KD2QYC	3123583
Chris Prioli, AD2CS	3195449
Michael Resnick, N2WOQ	1134013
Len Rust III, W2LJR	3186225
Len Rust IV, K2LJR	3196243
Dave Sheppard, W2PAX	3112666
Cory Sickles, WA3UVV	1142052
James Simeone, KC2AOF	3134848
Court Smith, KD2SPJ	3186243
Jackson Snyder, AI2D	3164371
Rich Subers, W2RHS	3204316
Brett Waller, K2BKW (KC2UXQ)	3134261
Bill Wood, KD2OSJ	3197459
John Zaruba Jr, K2ZA	3134331

For more information, DMR links, and W2LJR's DMR presentations, go to :
https://gloucestercountyarc.weebly.com/dmr.html

CrossTalk Submissions

This is your Club Magazine. Make use of it.

If you have stories or photos of your hobby that you would like to share with the Club, please do so! We will keep covering all of the GCARC events, but it is also nice to get those personal perspectives to include in every issue. Connecting through experiences is what makes the Gloucester County Amateur Radio Club a *REAL* Club.

All submissions, queries, comments, and editorials should be addressed to :
Jeff Garth, WB2ZBN at djgrath1 <*at*> gmail <*dot*> com

Submission deadline for the March 2025 issue : Thursday, February 20, 2025

Club Website www.w2mmd.org
Club E-Mail Reflector : GCARC <*at*> Mailman <*dot*> QTH <*dot*> Net

DMR Configuration Sequence

1. **Obtain and Configure DMR ID :**
   - **https://www.radioid.net**
2. **Download Contact List :**
   - **http://www.dmrcontacts.com**
3. **Identify Repeater or Hotspot :**
   - **https://www.repeaterbook.com**
4. **Define Talk Groups**
   - **Numerical ID**
   - **Text Name**

https://brandmeister.network/?page=talkgroups

5. **Create Channel**
   - **Select Number**
   - **Assign Name**
   - **Select DMR ID**
   - **Assign Frequency**
     - **Transmit**
     - **Receive**
     - **Bandwidth**
     - **Power**
     - **DMR Mode (Simplex/Repeater)**
     - **TX Permit (Channel Free)**
   - **Assign Talk Group**
   - **Assign Color Code**
     - **Agreed Upon with Other Users**
   - **Assign Time Slot**
   - **Agreed Upon with Other Users**
6. **Create Zone**
7. **Add Channels to Zones**
8. **Configure Features**
9. **Upload Code Plug**
10. **Upload Contact List**

If you recently changed your callsign, contact idteam@dmr-marc.net to have your DMR ID transferred to your new callsign.

ARES Resources (Updated as of November 2024)

ARRL ARES Registration Form : https://bit.ly/3Ae2pCf
Download the ARES Manual [PDF] : https://bit.ly/3iUhJLQ
ARES Field Resources Manual [PDF] : https://bit.ly/3QT4PtY
ARES Standardized Training Plan Task Book July 2024 Ver. 3.0 [Fillable PDF] : https://bit.ly/4dToEes
ARES Standardized Training Plan Task Book July 2024 [Word] : https://bit.ly/4heLXSU
ARRL ARES Plan July 2024 : https://bit.ly/3Uf8gyf
ARES Group Registration : http://bit.ly/3XodGpX
ARRL Emergency Communications Training : http://bit.ly/3J2gMMf
FEMA 2023 National Preparedness Report : https://bit.ly/3YrPWnY
Southern New Jersey Section Emergency Operations Plan 2023.PDF : https://bit.ly/3YqMdHb
ARRL ARES Monthly Newsletters : https://bit.ly/408OV5d

The Amateur Radio Emergency Service® (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment, with their local ARES leadership, for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization is eligible to apply for membership in ARES. Training may be required or desired to participate fully in ARES. Please inquire at the local level for specific information. Because ARES is an amateur radio program, only licensed radio amateurs are eligible for membership. The possession of emergency-powered equipment is desirable but is not a requirement for membership.

If you are interested in learning more about the Gloucester County ARES Program or becoming an ARES member, please contact Bob Keogh (KD2NEC@QSL.NET)

2024-2028 Element 4 Amateur Extra Class License Question Quiz

This month we continue with Subelement E2 Operating Procedures (5 exam questions - 5 groups).
(Answers on Last Page)

E2B01
In digital television, what does a coding rate of 3/4 mean?
A. 25% of the data sent is forward error correction data
B. Data compression reduces data rate by 3/4
C. 1/4 of the time interval is used as a guard interval
D. Three, four-bit words are used to transmit each pixel

E2B02
How many horizontal lines make up a fast-scan (NTSC) television frame?
A. 30
B. 60
C. 525
D. 1080

E2B03
How is an interlaced scanning pattern generated in a fast-scan (NTSC) television system?
A. By scanning two fields simultaneously
B. By scanning each field from bottom-to-top
C. By scanning lines from left-to-right in one field and right-to-left in the next
D. By scanning odd-numbered lines in one field and even-numbered lines in the next

E2B04
How is color information sent in analog SSTV?
A. Color lines are sent sequentially
B. Color information is sent on a 2.8 kHz subcarrier
C. Color is sent in a color burst at the end of each line
D. Color is amplitude modulated on the frequency modulated intensity signal

E2B05
Which of the following describes the use of vestigial sideband in analog fast-scan TV transmissions?
A. The vestigial sideband carries the audio information
B. The vestigial sideband contains chroma information
C. Vestigial sideband reduces the bandwidth while increasing the fidelity of low frequency video components
D. Vestigial sideband provides high frequency emphasis to sharpen the picture

E2B06
What is vestigial sideband modulation?
A. Amplitude modulation in which one complete sideband and a portion of the other are transmitted
B. A type of modulation in which one sideband is inverted
C. Narrow-band FM modulation achieved by filtering one sideband from the audio before frequency modulating the carrier
D. Spread spectrum modulation achieved by applying FM modulation following single sideband amplitude modulation

Element 4 Amateur Extra Class Quiz - Continued on page 32

E2B07
Which types of modulation are used for amateur television DVB-T signals?
A. FM and FSK
B. QAM and QPSK
C. AM and OOK
D. All these choices are correct

E2B08
What technique allows commercial analog TV receivers to be used for fast-scan TV operations on the 70-centimeter band?
A. Transmitting on channels shared with cable TV
B. Using converted satellite TV dishes
C. Transmitting on the abandoned TV channel 2
D. Using USB and demodulating the signal with a computer sound card

E2B09
What kind of receiver can be used to receive and decode SSTV using the Digital Radio Mondiale (DRM) protocol?
A. CDMA
B. AREDN
C. AM
D. SSB

E2B10
What aspect of an analog slow-scan television signal encodes the brightness of the picture?
A. Tone frequency
B. Tone amplitude
C. Sync amplitude
D. Sync frequency

E2B11
What is the function of the vertical interval signaling (VIS) code sent as part of an SSTV transmission?
A. To lock the color burst oscillator in color SSTV images
B. To identify the SSTV mode being used
C. To provide vertical synchronization
D. To identify the call sign of the station transmitting

E2B12
What signals SSTV receiving software to begin a new picture line?
A. Specific tone frequencies
B. Elapsed time
C. Specific tone amplitudes
D. A two-tone signal

Regional Skywarn Websites For On-Line And In-Person Training Classes

Philadelphia/Mt Holly Skywarn : www.weather.gov/phi/skywarn
State College, PA Skywarn : www.weather.gov/ctp/skywarn
Pittsburgh, PA Skywarn : www.weather.gov/pbz/skywarn

Weather Information Nets & Frequencies

Hurricane Watch Net : www.hwn.org

- **Day Time : 14.325 MHz**
- **Night Time : 7.268 MHz**
- **Information : 14.300 MHz**

Local SKYWARN Frequencies :

- **Atlantic County : K2BR, 146.745 MHz (-) 146.2 Hz**
  - ◊ **Net Every Monday @ 1900 Hours**
- **Camden County : K2EOC, 146.895 MHz (-) 91.5 Hz**
  - ◊ **Net Every Thursday @ 2030 Hours**
- **Cumberland County : KE2CK, 146.805 MHz, (-) 118.8 Hz**
  - ◊ **Net Every Monday @ 1930 Hours**
- **Gloucester County : W2MMD, 147.180 MHz (+) 131.8 Hz**
  - ◊ **Net Every Sunday @ 1930 Hours**
- **Salem County : N2KEJ, 146.625 MHz (-) 131.8 Hz**

Moon Eats Mars!

January 13, 2025 : Watched the Moon cover up Mars tonight. Club member Ben NE2R was on the phone with me during the event, watching from his QTH the same. Tried to take a cell phone picture of what I was seeing through the inverting telescope's eyepiece. Not that great, but here it is. Mars is the dot at the top. About 3 minutes after this picture was taken, Mars was completely eaten. Cold, but fun!

Jim Wright, N2GXJ

Club Merchandise from the K2ZA Workshop

Contact John Zaruba Jr, K2ZA at k2za@icloud.com
Go To : https://gloucestercountyarc.weebly.com/club-merchandise.html

Volunteer Monitor Program Report - November 2024

The Volunteer Monitor (VM) Program is a joint initiative between ARRL and the FCC to enhance compliance in the Amateur Radio Service. This is the November 2024 activity report of the VM Program.

- Commendations were issued to amateurs in Sequim, Moses Lake, Richland, Bothell, Morton, and Soap Lake, Washington; Placerville, California, and Bend, Oregon, for exemplary operation as net control operators of the Columbia Basin Net operating on 3.960 MHz.
- An amateur radio operator in Maryland received a commendation for exemplary AM operation and for explaining proper AM operating procedures and transmitter settings to those participating in AM communications.
- Operators in Louisiana and Arizona received advisories for operation with expired licenses.
- A Technician-class operator in Florida received an advisory for FT8 operation on 40 meters. Technicians can only use CW on 40 meters. A Technician-class operator in Utah received an advisory concerning FT8 operation on 30 meters. Technicians have no operating privileges on 30 meters.
- An operator in Florida received an advisory for unattended robotic FT8 operation on 14.074 MHz. Under FCC Rule 97.221(b), an unattended station may be auto-controlled only while transmitting on RTTY or data on the subbands of 14.0950 - 14.0995 or 14.1005 - 14.112 MHz. Such stations may not call CQ and can only respond to being polled.

The totals for October 2024 monitoring were 1,562 hours on HF frequencies, and 2,215 hours on VHF frequencies and above, for a total of 3,777 hours.

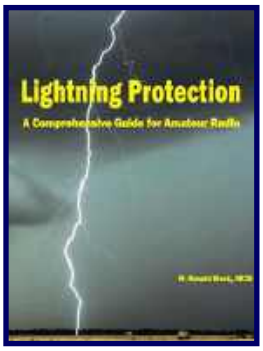
Thanks to Volunteer Monitor Program Administrator Riley Hollingsworth, K4ZDH

Full Snow Moon - February 12, 2025 @ 0854 Hours

In the 1760s, Captain Jonathan Carver, who had visited the Naudowessie (Dakota) and others, wrote that the name used for this period was the Snow Moon, "because more snow commonly falls during this month than any other in the winter." The Cree called this the Bald Eagle Moon or Eagle Moon. Bear Moon (Ojibwe) and Black Bear Moon (Tlingit) refer to the time when bear cubs are born. The Dakota called this the Raccoon Moon, and certain Algonquin peoples named it the Groundhog Moon. The Haida named it Goose Moon. The Cherokee names of "Month of the Bony Moon" and "Hungry Moon" give evidence to the fact that food was hard to come by at this time.

Old Farmer's Almanac - www.almanac.com

Lightning Protection :
A Comprehensive Guide for Amateur Radio
Author : W. Ronald Block, NR2B
Contact : ron@wrblock.com
Website : www.wrblock.com



Another FREE Clubhouse Resource Available To All Club Members

Training May Be Required : See Jon Pearce, WB2MNF For Details

Karl and his Accordion entertaining the troops at the Holiday Dinner!

2024 GCARC Holiday Dinner Highlights

2024 GCARC Holiday Dinner Highlights

Gloucester County Amateur Radio Club
General Membership Meeting Minutes
Wednesday, January 8, 2025

Meeting opened @ 1900 Hours by President Jon Pearce, WB2MNF with the Pledge of Allegiance to the Flag

ATTENDANCE :

- **In-person : 28**
- **Zoom : 21**

VISITORS :

- **Troy Clancy KE2BXW, Franklinville, NJ**

NEW MEMBERS :

- **James Archer, N3ZS/5Z4FV, an Amateur Extra Class from Elverson, PA and Kenya**
- **Ted Coats, ND3Q, an Amateur Extra Class from Philadelphia, PA**
- **Frank Parsinitz, KD2GSY, a Technician Class from Gibbsboro, NJ**
- **Jose Velez Jr, KE2EUS, a Technician Class from Vineland, NJ**

ANNOUCEMENTS :

- **Club dues are due!**

UPCOMING EVENTS :

- VEC Testing : Thursday 01/09/2025 7:00 PM
- Tech Saturday Forum : 01/11/2025 9:00 AM
- BoD Meeting : Wednesday 01/15/2025 7:00 PM
- Zoom Tech Net : FT8 training, Monday 01/20/2025 7:30 PM
- NanoVNA Classes : Tuesday 01/21/2025 and Thursday 01/23/2025
- Dinner at the Clubhouse : Wednesday 01/22/2025 6:00 PM
- Winter Field Day : Saturday 01/25/2025

MEMBER CURRENT ACTIVITIES :

- **Chris Prioli AD2CS** is building a "Smartphone HT"
- **John Zaruba Jr K2ZA** is building a QRP Labs QMX transceiver

BUSINESS MEETING :

Minutes of December 2024 business meeting as published in Crosstalk were approved by voice vote of members present.

TREASURER'S REPORT :

- **2024 Operating Income and Expense**
  - **Income : $20,245.85**
  - **Expense : $12,305.86**
  - **Net : $79,39.99**

Treasurer's report approved by voice vote of members present.

January 2025 General Membership Meeting Minutes - Continued on page 39

January 2025 General Membership Meeting Minutes - Continued from page 38

GLOUCESTER COUNTY AMATEUR RADIO FOUNDATION :

- **Report :**
  - **Income : $16,045.49**
  - **Expense : $12,463.49**
  - **Net : $3,582.00**

CLUBHOUSE REPORT :

- Report : **Frank Romeo N3PUU** described the current state of the new VHF towers.

FUTURE PROGRAMS :

Report : **Ron Block** NR2B is soliciting member feedback on potential topics for upcoming General Membership Meeting programs. Topic choices listed below :

- RT Systems : Introduction to radio programming
- Spencer Webb W2SW : Feed lines
- Alan Wolke W2AEW : VNA to measure return/insertion loss, coax fault/length, SWR/Smith chart
- Meshtastic : Network/system overviewW0TML haysradio.com
- Cyber Security for ham radio operations - Jack Parks, KQ4JP
- M17 Project : CODEC for voice communications
- SkyWarn : Overview of what to look for and report - Dennis Dura
- W2MMD HF and VHF stations configuration
- Fox Hunt : The process, techniques, and tools
- EME/Satellite communications
- ADS-B Communications : Aircraft & voice communications
- FCC Exposure : Rules and calculations
- SDR : N2RJ SJRA
- VNA : N2IDW SJRA
- Solar Power in the Ham Shack : SJRA
- Weak Signal : SJRA
- WSJT-X Operation on K2AA Remote : SJRA
- Antenna Concepts and Design : SJRA
- EME : W2JAZ SJRA
- Digital Modes : SJRA
- Home Brew Antennas : SJRA
- Satellite Presentation : W2JAZ SJRA
- Log Programs : HRD, ACL, DXLab Suite, Log4OM : SJRA

DX AND CONTESTS :

Report : Tony Starr K3TS provided his recommendations for contests in January 2025. See CrossTalk for details.

PUBLIC SERVICE :

Report : **Bob Keogh KD2NEC** reported on-going developments with the Red Cross communications trailer, donation of a PodRunner to the GCARC by Cooper University Healthcare. **Karl Franks W2KBF** discussed participation in Winter Field Day.

January 2025 General Membership Meeting Minutes - Continued on page 40

January 2025 General Membership Meeting Minutes - Continued from page 39

EDUCATION COMMITTEE :
Report : **Chris Prioli AD2CS** reported on the upcoming NanoVNA class 1/21 and 1/23/2025

CONSTITUTION COMMITTEE :
Report : **Ron Block NR2B** reported on upcoming constitution changes to accommodate inclusion of the Volunteer Examiner function and funds into the Club.

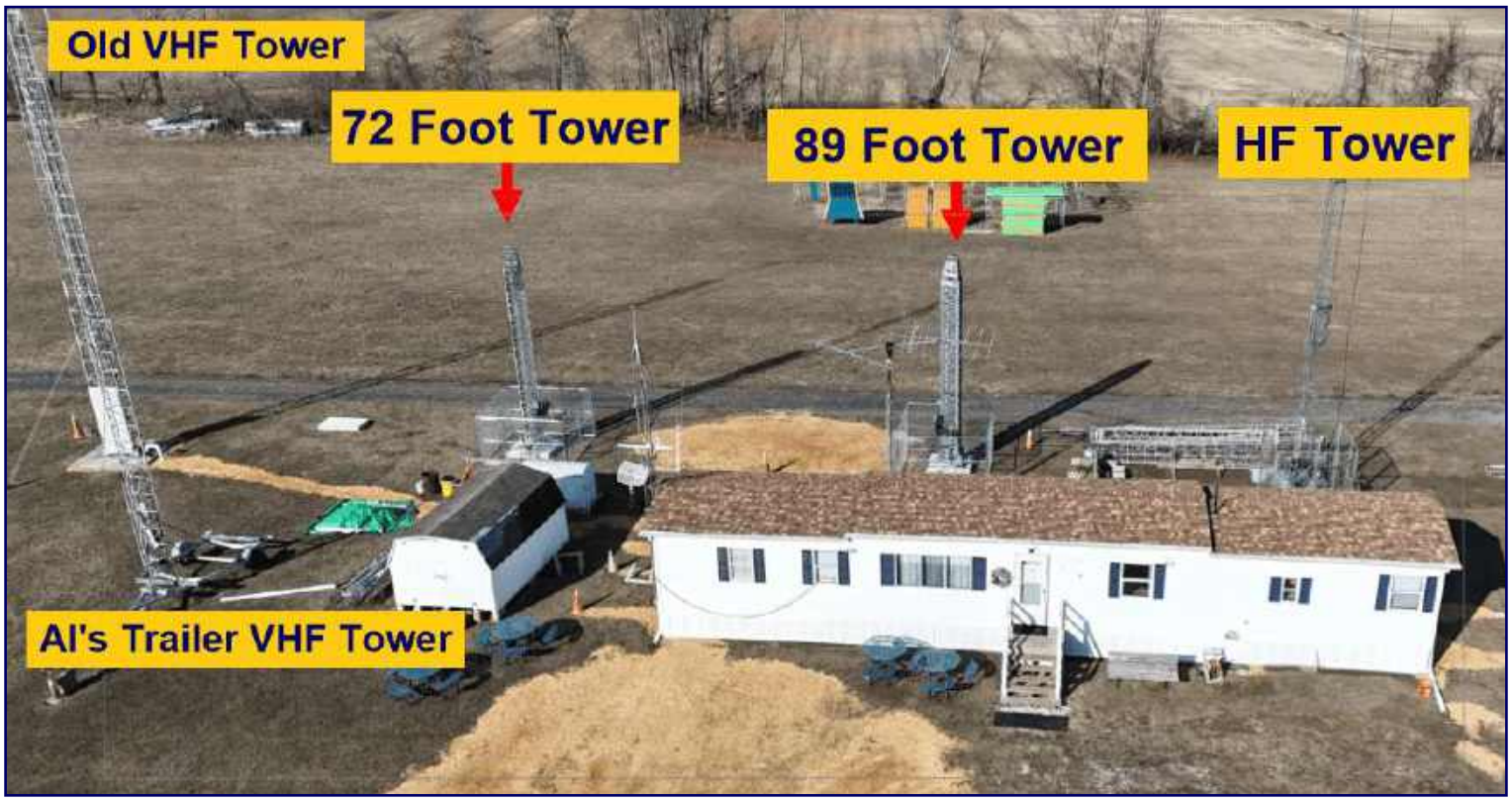
OLD BUSINESS : None

NEW BUSINESS : None

PRESENTATION : "Reverse Beacon Network" by Steve McGarry WS2C

Meeting adjourned @ 2016 Hours

Respectfully submitted,
John Zaruba K2ZA, Recording Secretary

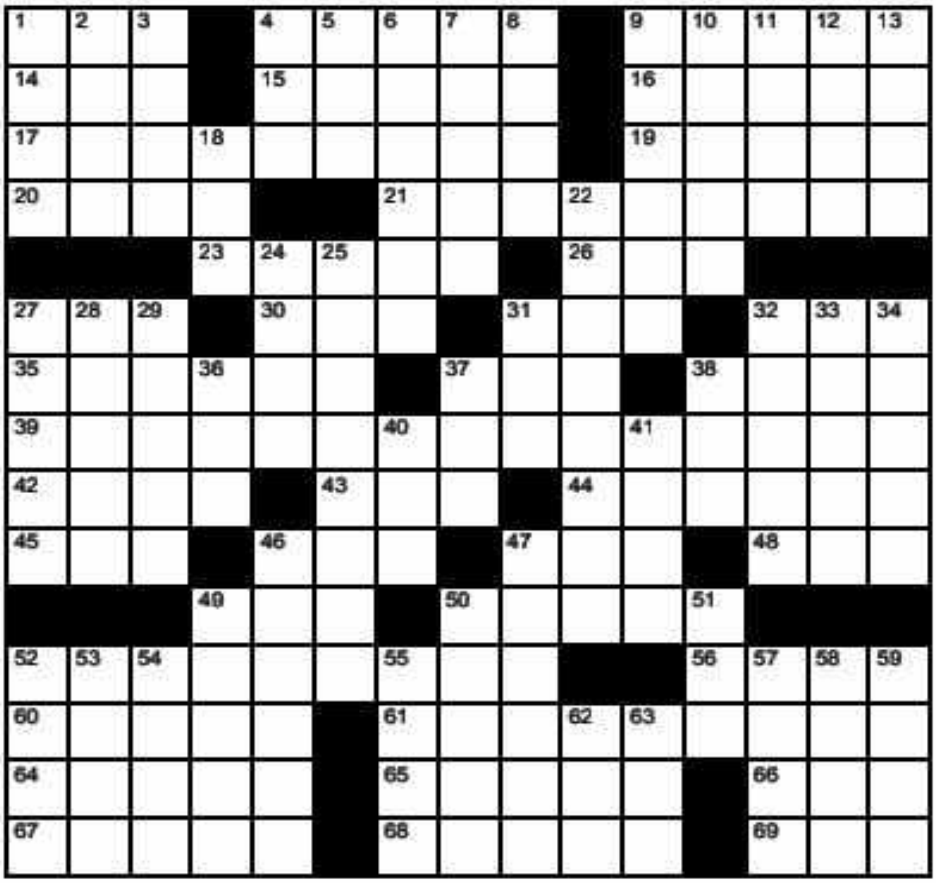


New Additions To The W2MMD Antenna Farm

- **The 72 footer will have 2 Meter, 1.25 Meter, and 70 Centimeter antennas**
- **The 89 footer will have 902 MHz, 1296 MHz, 2.4 GHz, 5 GHz, and 10 GHz antennas**

by Chris Codella, W2PA 10/6/2009

Sport Sort



Crossword Puzzle courtesy of https://www.w2pa.com/Home/articles/crossword-puzzles

Across

1. Internet spec.
4. Word with radiation
9. A contest meth.
14. Wil' Wright's bro'?
15. Acquired relative
16. Icom rig
17. Word with CQ
19. Cut loose
20. Western ham org.
21. Add 50 ohms, say
23. Types of cap.
26. DXCC awd. unit
27. Contester's objective, often
30. The end of CW
31. Amp. opp.
32. FMT unit
35. Wire coating
37. W4 state
38. Market type
39. Rock group calculators?
42. Coalition
43. QRS followers
44. Belonging to W1AW
45. Non-OMs
46. Game piece
47. Dot follower
48. ZL dir. from JA
49. Military address
50. Navigation acronym
52. Cover, as with fabric
56. New Englanders
60. Emit photons
61. Words with Europe or Continents
64. Hidden
65. In the ether
66. PY or CT saint
67. It's clean, in November
68. City in 37-across
69. SWR meter label

Down

1. Kind of hall
2. Gator's cousin
3. Eastern ham org.
4. A hand
5. LA dir. from JA
6. Murphy's work
7. Puts on cargo
8. The America's Cup trophy, e.g.
9. Quick test
10. Ain't right?
11. VE1 first name
12. JA assembly
13. Lot of loot
18. Polarized light disp.
22. Figure of speech
24. Footnote word
25. Officers, and others
27. Like duck feet
28. Collectively
29. Milli-micros?
31. 1996 Olympic flame lighter
32. They're entered in court
33. Makes waves?
34. All together, with en
36. W3 sect.
37. One way to C U on the bands
38. Cone maker
40. Solder target
41. Mike lead-in
46. Hoped-for response to CQ test
47. OK was one
49. Weather balloon unit, with radio
50. 9L ender
51. Affirmative action
52. IRC seller
53. "That was close!"
54. Take on
55. New Yorkers and others
57. Sat. org.
58. Flamboyance
59. Tab target
62. P5 authority
63. Diamond stat

Answers on Page 48

RF Probe Design And Build For Conar 231 Signal Tracer

By Chris Prioli, AD2CS - chris@ad2cs.com - www.ad2cs.com

I am currently in the middle of a repair to a **Conar 231 Tuned Signal Tracer (Figure 1),** circa 1978, that came in to my shop in an inoperative condition. That repair will be the subject of another article, most likely an ***At The Repair Bench*** short. The subject of ***this*** article is the fact that the owner of this signal tracer also needed a probe that is suitable for use with the signal tracer, as he bought the unit used and it did not come with either a manual or a probe.

Figure 1 : Conar 231 Tuned Signal Tracer

I did some research and determined that the unit requires the use of an active RF amplifying probe, so I set out to design and build one for him. While it may seem backwards, I actually started with determining what I could use as the body of the probe, as that would determine the dimensions of the printed circuit board (PCB) that I could fit inside of that body. I was at a loss for a suitable probe body for quite a bit. I considered using the clear plastic penny tubes that I have used before, except that the interior dimensions would not support a PCB any more than about a half-inch wide by about two inches long. In addition, I would have to copper-wrap the tube for shielding and ground purposes, and then cover the copper wrap for an acceptable outward appearance. What I really wanted was a metal tubular body of adequate size in both length and diameter. A metal tube would be naturally shielding and could be tied to the ground of the PCB and cable.

After a bit of thought and looking at various options, I hit upon an ideal solution. I have several of the aluminum tubular plunger-type solder-sucker desoldering tools **(Figure 2)**. Some of them have threaded caps on the two ends of the tube. The tube dimensions are 3.3 inches long by 0.7 inches inside diameter. The space available for a PCB ends up at about 2.5 inches by about 0.65 inches. I decided to use one of these tools as the base body for the probe. The ***Teflon™*** tip would serve as a great support for the probe tip, which I would fabricate out of a short length of 10AWG solid wire, stripped for about a quarter of an inch at the outer end and filed to a point.

Figure 2 : Solder-Sucker Tool

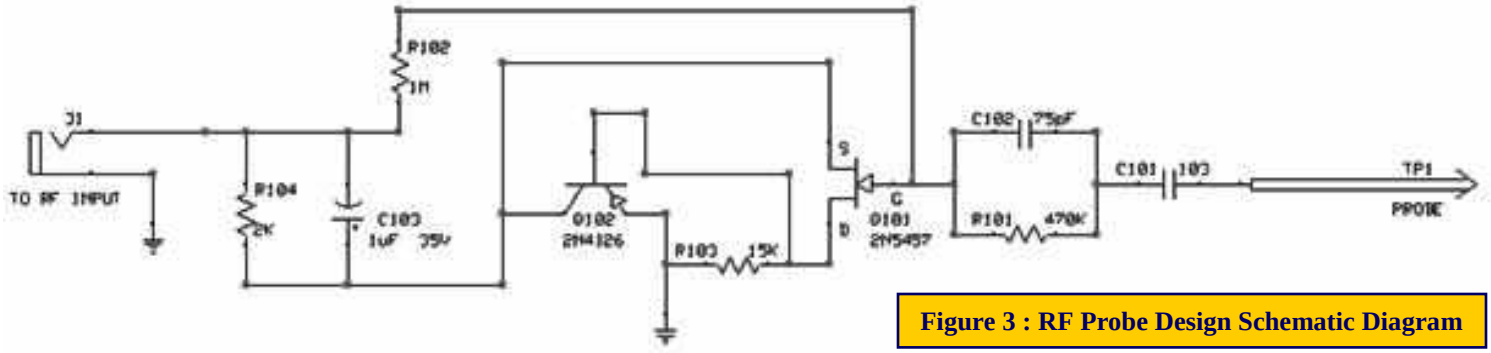


Figure 3 : RF Probe Design Schematic Diagram

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RF Probe Design & Build - Continued from page 42

With the tube dimensions in mind, I began the electronic design work, starting by drafting a suitable circuit, as shown in the schematic in **Figure 3**. I designed the probe circuit to use commonly-available components that I had in stock, including a 2N5457 N-channel FET and a 2N4126 PNP transistor, both of which are in the ubiquitous TO -92P case. Then, I designed an appropriate PCB and had it put into production. The PCB design is shown in **Figure 4**.

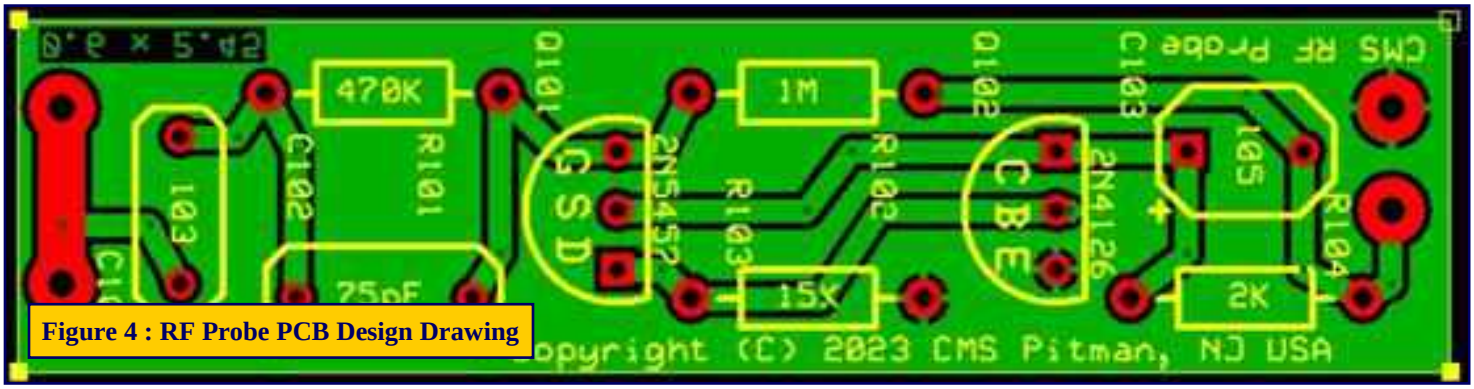

Figure 4 : RF Probe PCB Design Drawing

A few words are called for as regards the design of the RF probe circuit. An important consideration was the desire ***not*** to load the circuit under test. To that end, the probe circuit was designed as a high input impedance circuit using a 2N5457 N-channel field-effect transistor in a source-follower configuration. The signal is then amplified in the probe to the requisite level for the input of the signal tracer, and is directed into the signal tracer through the input BNC connector. From there, the signal is fed into the coarse attenuator at the signal tracer input. The design of the probe circuit, in avoiding loading the circuit under test, provides a signal to the signal tracer that is as faithful as possible to the original signal in the device under test.

It may seem counter-productive to first amplify the signal and then to attenuate it, but there is a logic to that methodology. The idea is to have a signal of a known level progress through the signal tracer. In order to do that, the actual incoming signal must be of a greater amplitude than the signal to be processed within the tracer. By amplifying the signal in the probe, we provide that higher signal amplitude, at a level high enough that the attenuator circuits can then pick off the desired signal level for processing.

Figure 5 : Tool Parts For Probe Fabrication

While I was waiting for the PCB's to arrive from the manufacturer, I began the modifications to the solder-sucker tool to turn it into a probe body. I began by disassembling it into its three main parts and cleaning out all of the residual solder particles that were inside the unit. I then cut the pushrod for the plunger and removed the plunger and its detent from the upper cap of the tool. Next, I roughly cut off the plunger surround shell, and then followed that with a precision trimming of the cap to the desired final length. I did the cutting of the plastic cap using a rotary toothed saw blade in my ***Dremel***® tool. The resultant parts left from which I would fabricate the probe are shown in **Figure 5**.

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RF Probe Design & Build - Continued from page 43

Figure 6 : Jack In End Cap, With Plug

The next step was to prepare that cap for the installation of an unswitched 3.5mm mono TS phone jack which would be the mechanism by which the input cable to the signal tracer would attach to the probe. To prepare the cap, I first had to remove a portion of the support sleeve for the former plunger pushrod. I did this in the drill press, using a 3/8" twist drill and supporting the cap in my drill press vise. Drilling out the center of the support to the requisite depth was quite successful, though it did leave a thin shell of the support behind. I then went back to the ***Dremel***® tool, this time with an end-milling burr in the chuck. This end-mill made quick work of removing the shell and leaving a flat surface against which I could install the jack. All that remained was to drill out the original plunger pushrod bore to a diameter suitable for the threaded bushing of the new phone jack, a task once again done in the drill press. The resulting end cap, with the jack in place, is shown in **Figure 6**, together with the connecting plug that will be used.

Now, I could obviously have run the connecting cable straight through the end cap and soldered it directly to the PCB, and it would have worked just fine that way. However, I wanted to build in some dependability. Using the solder-sucker tube as the probe shell, with its truncated plastic end cap, does not provide for very much in the way of strain relief for the connecting coaxial cable. Plugging the cable into the probe creates a swivel point at the end of the probe, reducing stress on the cable assembly, which increases its dependability. In addition, making the cable such that it can be disconnected from the probe body also makes for easier overall storage of the unit.

The connecting cable was fabricated from a four-and-a-half foot (fifty-four inch) long length of RG-58 coaxial cable. Of course, the probe end was soldered to a 3.5mm TS phone plug, while the signal tracer end was provided with a 50Ω male BNC connector to mate with the female BNC jack on the front panel of the signal tracer unit.

Figure 7 : Probe Tip Assembled

As already mentioned, I fabricated the probe tip from a short length of white-insulated solid 10AWG wire. I slid the wire through the ***Teflon™*** tip from the inside, leaving about three-quarters of an inch of the wire length sticking out from the end of the ***Teflon™*** tube tip. I then stripped a quarter-inch of insulation from the protruding wire, and then filed the revealed copper wire to a point **(Figure 7)**. The inside end of the wire would later be shortened and stripped, and then soldered to the PCB at the correct location at the end of the board. The board is designed such that the wire can be passed through one hole, brought across the board part of the way, and then inserted into a second hole. It would then be soldered at both holes, providing plenty of strength for the probe tip. As time goes by, the wire point can be refiled to renew it as necessary.

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RF Probe Design & Build - Continued from page 44

Figure 8 : Completed Probe Assembly

The assembled probe, shown in **Figure 8**, is clean and compact. The tubular aluminum body shell is connected to the internal PCB ground via a brush wire protruding from a ground point on the board and dragging on the inside of the tube. To accompany the probe is a ground wire, simply made from a length of black 16AWG silicone test lead wire with an alligator clip on one end and a banana plug on the opposite end. It plugs into the ground banana jack on the front panel of the signal tracer. The whole thing, including the cost of the solder-sucker tool, comes in for less than twenty dollars materials cost, not bad for what it is and what it does. I am quite happy with the end result and I believe that the owner of the signal tracer will be happy as well. Oh yeah - I also sourced a digital copy of the manual and provided that to him in printed form as well. ***Full-service repairs!***

Volunteer Monitor Program Report - October 2024

The Volunteer Monitor (VM) Program is a joint initiative between ARRL and the FCC to enhance compliance in
the Amateur Radio Service. This is the October 2024 activity report of the VM Program.

- An amateur radio operator in Wyoming received a commendation for relinquishing 3.927 MHz during a regularly scheduled net operation to allow emergency traffic related to the Asheville, North Carolina, floods and relief efforts on September 24, 2024.
- An amateur radio operator in Florida received a commendation for work on the Florida SARnet 444.325 MHz repeater, in cooperation with Florida's state emergency agency, during a hurricane and ensuing storm.
- An amateur radio operator in Illinois received a commendation for working with a local emergency management agency on the W9ANL 146.900 MHz repeater in an effort to clear downed trees and power lines after storms.
- Technician-class operators in Idaho and Washington received advisory notices about FT8 operation on 40 meters. Technicians have only CW privileges on 40 meters. Two Technician-class operators in California, and one in Oregon, received advisory notices concerning operation of FT8 on 20 meters. Technicians have no operating privileges on 20 meters.
- An operator in South Carolina received an advisory notice concerning interference on 3.933 MHz after refusing to leave a net operating on that frequency.
- An operator in New York received an advisory notice concerning interference on 7.200 MHz with digital signals such as EasyPal, Freenet, and SSTV, as well as general noises. An operator in Alabama received an advisory notice concerning operation on SARnet utilizing harassment and a false call sign. Each licensee was cautioned that such operation would be an issue during any license renewal proceedings.
- There were two Volunteer Monitor alerts issued in October to Monitors east of the Mississippi, to monitor for interference to hurricane and tropical storm emergency nets during the month. No instances of interference were detected.

The totals for September monitoring were 1,443 hours on HF frequencies, and 1,761 hours on VHF frequencies and above, for a total of 3,204 hours.

Thanks to Volunteer Monitor Program Administrator Riley Hollingsworth, K4ZDH

Gloucester County Amateur Radio Club
Board of Directors Meeting Minutes
Wednesday, January 15, 2025

Meeting opened @ 1900 Hours by President Jonathan Pearce, WB2MNF

Attendance :

- **President Jon Pearce, WB2MNF : Present**
- **Vice President Ron Block, NR2B : Present**
- **Treasurer John O'Connell, K2QA : ZOOM**
- **Recording Secretary John Zaruba Jr, K2ZA : Present**
- **Corresponding Secretary Mike Resnick, N2WOQ : Present**
- **Director (2022-2024) Jeffrey Garth, WB2ZBN : ZOOM**
- **Director (2022-2024) Frank Romeo, N3PUU : Present**
- **Director (2023-2025) Chris Prioli, AD2CS : Present**
- **Director (2023-2025) James Wright, N2GXJ : Present**
- **Director (2024-2026) Al Arrison, KB2AYU : Present**
- **Director (2024-2026) Bill Price, NJ2S : Present**
- Trustee (2022-2025) Charles Lanard, KD2EIB :
- Trustee (2023-2026) Sheldon Parker, K2MEN :
- **Trustee (2024-2027) Len Rust, W2LJR : Present**
- **Trustee (2025-2028) Earl Moore, KC2NCH : Present**
- **Member Karl Frank, W2KBF : Present**
- **Member Jim Beury, KE2DRN : Present**

New Member Applications :

- **Marshall Baker, KC2DFO, Eastampton, NJ**
- **Bryan Bossle, KE2APN, Sicklerville, NJ**
- **Troy Clancy, KE2BXW, Franklinville, NJ**
- **Kevin Witter, Associate Member, Mullica Hill, NJ**

New members approved by voice vote of Club officers present.

Treasurer's Report :

- **Year to date :**
  - **Income : $1,445.41**
  - **Expense : $186.94**
  - **Net : $1,258.47**

Detailed financial statements are available for member review upon request. Report approved by voice vote of Club officers present.

Clubhouse Report :

- Outside work paused due to weather

January 2025 Board of Directors Meeting Minutes - Continued on page 47

January 2025 Board of Directors Meeting Minutes - Continued from page 46

Repeaters :

- **Frank Romeo N3PUU** and **John Zaruba Jr K2ZA** working on MMDV board to convert the KD2KNB repeater in Glassboro from Yaesu C4FM to DMR.

Programs and Activities :

- **Ron Block NR2B** reported on upcoming GM meeting presentations
- **Jim Wright N2GXJ** discussed potential winter fox hunt.
- **Karl Frank W2KBF** discussed upcoming Winter Field Day.

Education Committee :

- NanoVNA class happening 1/21 and 1/23/25.
- Next licensing class starting the end of March.

Technical Committee :

- **Jon Pearce WB2MNF** discussed potential next projects.

Club Radio Nets :

- **December 2M Nets**
  - **Tuesdays : 8 Average Check-Ins**
  - **Thursdays : 6 Average Check-Ins**

Old Business :

- Previous meeting minutes approved by voice vote of Club officers present.
- **Mike Resnick N2WOQ** discussed Club QSL card issues.
- **Chris Prioli AD2CS** and **Frank Romeo N3PUU** discussed catering options for the 2025 Holiday Party.

New Business :

- **Jim Beury KE2DRN** discussed ideas for engaging and retaining new members.
- **Ron Block NR2B** presented proposed changes to the Club constitution to accommodate the VE Test team into the Club financial structure. Motion to submit changes to the general membership passed by voice vote of Club officers present.
- **John O'Connell K2QA** presented the proposed 2025 GCARC Operating Budget. Budget approved by voice vote of Club officers present.
- **Jeff Garth WB2ZBN** (via e-mail) raised some concerns about the Zoom aspect of the General Membership meeting. BoD members discussed.

Meeting adjourned @ 2042 Hours

Respectfully Submitted,
John Zaruba K2ZA
Recording Secretary

To Be Added To The DX HONOR ROLL,
Please contact Ernest Kraus, KD2EAV
meanddelcanotc@verizon.net

Name/Callsign	DXCC
Bill Grim, W0MHK	352
Dave Strout, W2YC	349
Edward De Fonzo, W2DE	339
Darrell Neron, AB2E	336
Bob Pantazes, W2ARP	290
John Hill, W2HUV	271
Vinnie Sallustio, N4NYY	271
Gary Castellini, N2IEC	270
Sheldon Parker, K2MEN	262
Jim Wright, N2GXJ	258
Ken Denson, WB2P	248
Tony Starr, K3TS	242
Dennis Sandole, K2SE	231
Howard Marder, WA2IBZ	157
Eric Morris, N2BRJ	157
Art Strong, KA0WS	155
Steve Farney, W2SEF	147
Phil Nunzio, WA3RGY	144
Rich Subers, W2RHS	133
Bart Kleczynski, AC2PT	124
Marc Federici, WM2Y	117
Ben Johnson, NE2R	116
Chuck Capasso, WB2PGE	104
Harry Strahlendorf Jr, W3DNQ	103
Jim Clark, KA2OSV	87
Lee Marino, N2LAM	71
Updated As Of 01/25/2025	

T	C	P	■	A	N	G	L	E	■	S	A	N	D	P
O	R	V	■	I	N	L	A	W	■	P	R	O	I	I
W	O	R	L	D	W	I	D	E	■	R	E	V	E	L
N	C	C	C	■	■	T	E	R	M	I	N	A	T	E
■	■	■	D	I	S	C	S	■	E	N	T	■	■	■
W	I	N	■	D	A	H	■	A	T	T	■	P	P	M
E	N	A	M	E	L	■	A	L	A	■	F	L	E	A
B	A	N	D	M	U	L	T	I	P	L	I	E	R	S
B	L	O	C	■	T	U	V	■	H	I	R	A	M	S
Y	L	S	■	P	E	G	■	C	O	M	■	S	S	E
■	■	■	S	I	R	■	L	O	R	A	N	■	■	■
U	P	H	O	L	S	T	E	R	■	■	O	N	E	S
S	H	I	N	E	■	W	O	R	K	E	D	A	L	L
P	E	R	D	U	■	O	N	A	I	R	■	S	A	O
S	W	E	E	P	■	S	E	L	M	A	■	A	N	T

Crossword Puzzle Answers From Page 41

Hmm...It's Saturday and you want to know if someone is at the Clubhouse? Why not call and find out! What!!!

W2MMD Clubhouse : (856) 244-6914

(Please, no free solar panel calls!)

February Birthdays

Congratulations To Our Members Who Are Celebrating A Birthday This Month

Chris Angelastro, KE2DST
Mike Angelastro, KE2DPQ
Kerri Caguiat, K2CAG
Bob Castellini, N2IEC
Todd Cecilio, KA2YNT
Greg Ciraula, K3GC
Ed De Fonzo, W2DE
Matt Duffield, KE2ECE
Todd Foster, W2TEF
Felicia Jackson, KE2BED
Bob Kay, KE2CEG
Dan Lenco, WA2BPH
Jim McCullough, KE2BEL
Bob Repetto, KE2DSX
Vinnie Sallustio, N4NYY
Bill Szkromiuk, W4WCS
Mario Tagliaferri, W3CGS
Ralph Verdi, KC2WVM
Jean Wilson-Kinney, KE2AHV

In Memoriam : February Birthdays

Philip Bakanowsky, WB2ONS
Barbara Bielecki, N2SBP
Marla Bozarth, N2DWR (President 1992, 1995)
Chuck Colabrese, WA2TML
Thomas Cusack, KC2THO
Salvatore DiAmore, WA2JCT
Milton Goldman, K3WIL (President 1963, Charter Member)
Robert Grimmer Sr, KN2QWO
Richard Harkins, N3RYO
Harry Lauer, N3ISO
William Lewitt, N2NLK
Harold Mathis, NJ2C
Harry McCormick Sr, WA2SEA
George Munns Jr, KB2GW
Richard Munyan Sr, W2RCM
Herbert Schuler, K2HPV (President 1977)
William Uhland, K4IDJ (Charter Member)
John Yeager Jr, N2PKF
Alvin Zipkin, KZ2N

GCARC Ham Exam Preparation Class Schedule
2025 Session IX - Class Times : 1800 - 2100 Hours
Weeks 1 through 10 + Review & VE Testing Week

Class Week	Class Date	License Class Study
Week 1	Monday, March 31, 2025	Technician Class
Week 1	Tuesday, April 1, 2025	General Class
Week 1	Friday, April 4, 2025	Amateur Extra Class
Week 2	Monday, April 7, 2025	Technician Class
Week 2	Tuesday, April 8, 2025	General Class
Week 2	Friday, April 11, 2025	Amateur Extra Class
Week 3	Monday, April 14, 2025	Technician Class
Week 3	Tuesday, April 15, 2025	General Class
Week 3	Friday, April 18, 2025	Amateur Extra Class
Week 4	Monday, April 21, 2025	Technician Class
Week 4	Tuesday, April 22, 2025	General Class
Week 4	Friday, April 25, 2025	Amateur Extra Class
Week 5	Monday, April 28, 2025	Technician Class
Week 5	Tuesday, April 29, 2025	General Class
Week 5	Friday, May 2, 2025	Amateur Extra Class
Week 6	Monday, May 5, 2025	Technician Class
Week 6	Tuesday, May 6, 2025	General Class
Week 6	Friday, May 9, 2025	Amateur Extra Class
Week 7	Monday, May 12, 2025	Technician Class
Week 7	Tuesday, May 13, 2025	General Class
Week 7	Friday, May 16, 2025	Amateur Extra Class
Week 8	Monday, May 19, 2025	Technician Class
Week 8	Tuesday, May 20, 2025	General Class
Week 8	Friday, May 23, 2025	Amateur Extra Class
Week 9	Monday, June 2, 2025	Technician Class
Week 9	Tuesday, May 27, 2025	General Class
Week 9	Friday, May 30, 2025	Amateur Extra Class
Week 10	Monday, June 9, 2025	Technician Class
Week 10	Tuesday, June 3, 2025	General Class
Week 10	Friday, June 6, 2025	Amateur Extra Class
Review & Exam Week	Monday, June 16, 2025	Technician Class
Review & Exam Week	Tuesday, June 10, 2025	General Class
Review & Exam Week	Friday, June 13, 2025	Amateur Extra Class

ARRL 160 Meter Contest 2024
December 6, 2024

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : SO Unlimited HP
QTH : SNJ
Operating Time (hrs) : 9
Location : USA

Summary :
Total : QSOs : 525 Sections: 65 Countries : 8
Total Score : 78,402

Club : Frankford Radio Club **124**

Comments :
Rig : FTDX-9000D/OM Power 2000A+ amp
RX Antenna : HiZ4
Antenna : Inverted L
9hrs operating time.

Great fun as usual, but for the times I was on, seemed like activity was down. First contest using replaced inverted-L to far corner of the property, with a level horizontal leg and 5 tuned radials.

Thanks for the QSOs and CU next weekend in the ARRL 10m Contest! 73 Darrell AB2E

Contest : ARRL160

Band	QSOs	Pts	Sec	Cty	Pt/Q
1.8	525	1,074	65	8	2.0
Total	525	1,074	65	8	2.0

Score : 78,402
1 Mult = 7.2 Q's

ARRL 10 Meter Contest 2024
December 14, 2024

Call : WB2PJH
Operator (s) : WB2PJH
Station : WB2PJH

Class : SO CW Unlimited HP
QTH :
Operating Time (hrs) : 11
Location : USA

Summary :

Band	QSOs	Mults
CW :	329	110
SSB :	0	0
Total :	329	110

Total Score : 144,760

Club : Frankford Radio Club **131**

ARRL 160 Meter Contest 2024
December 6, 2024

Call : K3TS
Operator (s) : K3TS
Station : K3TS

Class : SO Unlimited HP
QTH : WPA
Operating Time (hrs) : 14
Location : USA

Summary :
Total : QSOs : 682 Sections: 76 Countries : 16
Total Score : 131,008

Club : Frankford Radio Club **125**

Comments :
First 160m contest from the new QTH. It is so nice to be able to hear weak signals at the noise floor, as opposed to the S9+ noise levels at my old location. My hastily-built inverted-L seemed to work pretty well, even though my radial field is what I would consider to be inadequate. Maybe I will throw down another 500 feet of wire before the CQ 160 comes around.

Lots of participation, and at times I felt that there were more stations on than I could possibly work, but toward the end I think I got most of what I could hear. I missed WY and AK for WAS, and I actually worked more DX on this band in the recent CQWW, but it is what it is. This is an ARRL contest after all, so it is focused on North America. Within that scope, it is a good one.

Overall, I enjoyed the contest and look forward to the next one. Thanks to all who called in during my runs. 73 for now. Here are my station details :

Rural hilltop location at 1600 feet ASL. Rig : Kenwood TS-590sg. Amp : Acom 2000a. Antenna : Inverted L consisting of 45 feet of guyed tubing, with 95 feet of top wire attached to my nearby tower at 65 feet. 20 ground radials, each only 50 feet long. That's it. de K3TS

ARRL 160 Meter Contest 2024
December 6, 2024

Call : W2YC
Operator (s) : W2YC
Station : W2YC

Class : Single Op HP
QTH : SNJ
Operating Time (hrs) : 15
Location : USA

Summary :
Total : QSOs : 600 Sections: 78 Countries : 18
Total Score : 120,672

Club : Frankford Radio Club **126**

ARRL 10 Meter Contest 2024
December 14, 2024

Call : NE2R
Operator (s) : NE2R
Station : NE2R

Class : SO CW LP
QTH :
Operating Time (hrs) : 4:20
Location : USA

Summary :

Band	QSOs	Mults
CW :	100	38
SSB :		
Total :	100	38

Total Score : 15,200

Club : Frankford Radio Club **129**

Comments :
Conditions were excellent for CW. I was only able to squeeze in 4 hours for 100 QSOs, but it was especially nice on Sunday.

ARRL 10 Meter Contest 2024
December 14, 2024

Call : K3TS
Operator (s) : K3TS
Station : K3TS

Class : SO Mixed Unlimited HP
QTH : WPA
Operating Time (hrs) : 4
Location : USA

Summary :

Band	QSOs	Mults
CW :	105	101
SSB :	20	20
Total :	125	121

Total Score : 55,660

Club : Frankford Radio Club **128**

Comments :
A limited time effort, I operated when I could. And you really can't do that with 10 meters, because when the band is open it is very much alive, and the rest of the time, it is quite dead. Unfortunately, I had several things to do that could not wait. Happy Holidays to all, and congrats to all who made such impressive scores in this single band event. 73 for now.

de K3TS

ARRL 10 Meter Contest 2024
December 14, 2024

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : SO Mixed Unlimited HP
Class Overlay : Limited-Ant
QTH : SNJ
Operating Time (hrs) : 17.5
Location : USA

Summary :

Band	QSOs	Mults
CW :	845	164
SSB :	384	133
Total :	1,229	297

Total Score : 1,231,956

Club : Frankford Radio Club **127**

Comments :
Rig : FTDX-9000D/OM Power 2000A+
Antennas : F12 C3SS, C31XR tribanders
Op time : 17.5 hours

Wow, what fun. As the saying goes "Ain't no meters like 10meters!" Decent EU opening Sat morning, but was very tired and overslept, not starting til 9A local time. Sun got up at 6AM, band was not yet open, but came to life around 640A when I began to work some of the big gun EU stations on CW.

Beautiful 4hr run from that point on. This score is a lifetime high for this contest. CW QSOs are twice the points of SSB in this one, so natural to concentrate on CW, but work enough SSB to pick up the many mults. Over 20 of the Mexican states are in the log! It would be great to see more of them in the future.

73 Darrell AB2E

Contest : ARRL10M

Band	Mode	QSOs	Pts	S-P	Cty	Pt/Q
28	CW	845	3,380	67	97	4.0
28	USB	384	768	64	69	2.0
Total	Both	1,229	4,148	131	166	3.4

Score : 1,231,956
1 Mult = 4.1 Q's

Croatian DX Contest 2024
December 21, 2024

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : SO CW HP
QTH : SNJ
Operating Time (hrs) : 7
Location : USA

Summary :

Band	QSOs	Mults
80 :	50	11
40 :	162	25
20 :	53	24
15 :	105	24
10 :	22	16
Total :	392	200

Total Score : 193,300

Club : Frankford Radio Club **132**

Comments :
Rig : K4D/KPA1500
Antennas :
10/15/20 C31Xr @ 52ft
C3SS @ 50ft
40m XM-240 @ 75ft
80m Dipole @ 90ft

Great fun, but spent time Sat in OK DX RTTY. Mainly operated Sat evening. Overslept Sun AM but had a 40 QSO run on 15m in the last 20min of the contest. Great activity. 73 Darrell AB2E

Contest : 9ADX

Band	QSOs	Pts	ITU	LP	Pt/Q
3.5	50	322	8	3	6.4
7	162	1,062	12	13	6.6
14	53	148	15	9	2.8
21	105	324	13	11	3.1
28	22	77	10	6	3.5
Total	392	1,933	58	42	4.9

Score : 193,300
1 Mult = 3.9 Q's

Croatian DX Contest 2024
December 21, 2024

Call : W2YC
Operator (s) : W2YC
Station : W2YC

Class : SO CW HP
QTH : NJ
Operating Time (hrs) : 10
Location : USA

Summary :

Band	QSOs	Mults
80 :	25	9
40 :	177	23
20 :	132	24
15 :	86	24
10 :	119	22
Total :	539	102

Total Score : 225,114

Club : Frankford Radio Club **133**

ARRL 10 Meter Contest 2024
December 14, 2024

Call : W2YC
Operator (s) : W2YC
Station : W2YC

Class : SO Mixed Unlimited HP
QTH : NJ
Operating Time (hrs) : 19
Location : USA

Summary :

Band	QSOs	Mults
CW :	617	152
SSB :	119	93
Total :	816	245

Total Score : 702,170
Club : Frankford Radio Club **130**

OK DX RTTY Contest 2024
December 21, 2024

Call : WB2PJH
Operator (s) : WB2PJH
Station : WB2PJH

Class : SOAB HP
QTH :
Operating Time (hrs) : 9
Location : USA

Summary :

Band	QSOs	Pts	Countries	OK Stns
80 :	21	66	2	0
40 :	112	456	20	9
20 :	42	68	17	6
15 :	25	40	14	5
10 :	34	65	15	5
Total :	234	659	68	25

Total Score : 64,635
Club : Frankford Radio Club **135**

OK DX RTTY Contest 2024
December 21, 2024

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : SOAB HP
QTH : SNJ
Operating Time (hrs) : 4
Location : USA

Summary :

Band	QSOs	Pts	Countries	OK Stns
80 :	14	57	4	3
40 :	58	273	18	10
20 :	15	20	8	1
15 :	11	17	3	0
10 :	2	3	2	0
Total :	100	370	35	14

Total Score : 18,180

Club : Frankford Radio Club **134**

Comments :
Rig : K4D/KPA1500
Antennas : 10/15/20m C31XR @ 52ft, C3SS @ 50ft
40m XM-240 @ 75ft
80m dipole @ 90ft

Started out strong Sat evening, but was anxious to try to get a 2nd decoder going from within N1MM. 2Tone seemed the choice made by many. I had it all set up Fri afternoon, but 2Tone would not decode anything, not even gibberish. Thanks to K2XR who determined 2Tone was not getting sufficient audio to drive it. After several adjustments, I still could not get enough output, so moved on and installed GRITTY. Got that setup and working thanks to the excellent setup instructions in the N1MM Help Document. I operated some more Sat off/on but there did not seem to be much activity, at least the times that I was on. RTTY is rapidly becoming my favorite contest mode after CW.

CU in ARRL RTTY RU in January. 73 Darrell AB2E

Contest : OKDXRTTY

Band	QSOs	Pts	DXC	OKs	Pt/Q
3.5	14	57	4	3	4.1
7	58	273	18	10	4.7
14	15	20	8	1	1.3
21	11	17	3	0	1.5
28	2	3	2	0	1.5
Total	100	370	35	14	3.7

Score : 18,130

RAC Winter Contest 2024
December 28, 2024

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : Single Op CW HP
QTH : SNJ
Operating Time (hrs) : 6
Location : USA

Summary :

Band	CW Qs	Ph Qs	CW Mults	Ph Mults
160 :	2	0	1	0
80 :	41	0	7	0
40 :	58	0	11	0
20 :	88	0	11	0
15 :	34	0	11	0
10 :	62	0	9	0
Total :	285	0	50	0

Total Score : 87,200

Club : Frankford Radio Club **136**

Comments :
Rig : FTDX-9000D/OM Power 200A+
Antennas :
10m,15m,20m C31XR tribander @ 53ft, C3SS tribander @ 52ft
40m - XM-240 @ 75ft
80m - dipole @ 95ft
160m - Inverted L @ 100ft

Nice fun for short time I was on. Thanks for the QSOs. 73 Darrell AB2E

Contest : RAC

Band	QSOs	Pts	Sec	Pt/Q
1.8	2	20	1	10.0
3.5	41	302	7	7.4
7	58	452	11	7.8
14	88	422	11	4.8
21	34	300	11	8.8
28	62	248	9	4.0
Total	285	1,744	50	6.1

Score : 87,200
1 Mult = 5.7 Q's

An Ode To the Code

In days of old, when ops were bold,
And sideband had not been invented,
Words were passed by pounding brass,
And all were quite contented.

Unknown

NATO phonetic alphabet, codes & signals

The ability to communicate and make yourself understood can make a difference in life-threatening situations – imagine for example that you are trying to alert a search and rescue helicopter of the position of a downed pilot. To ensure clear communication, NATO uses a number of well-known formats which are in general use. NATO standardization agreements enable forces from many nations to communicate in a way that is understood by all.

Some standards can be found in everyday civilian and military life. "Bravo Zulu", typically signalled with naval flags on ships at sea and meaning "well done", is also commonly used in written communication by the military, for example by replying "BZ" to an email.

Phonetic alphabet

The NATO alphabet became effective in 1956 and, a few years later, turned into the established universal phonetic alphabet for all military, civilian and amateur radio communications.

International Morse Code

Morse code transmits text through on-off tones, light-flashes or clicks. It was widely used in the 1890s for early radio communication, before it was possible to transmit voice.

Flaghoist communication

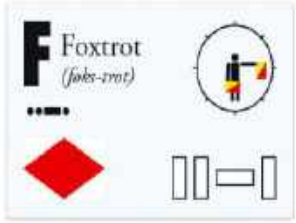
Ships use flags as signals to send out messages to each other. The use of flags, known as flaghoist communication, is a fast and accurate way to send information in daylight.

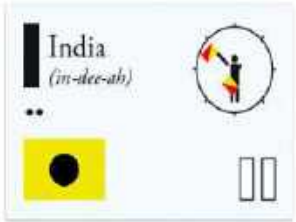
Semaphore

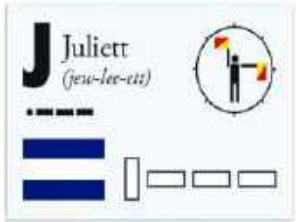
Semaphore is a system in which a person sends information at a distance using hand-held flags – depending on the position of the flags, the message will vary. The signaller holds the flag in different positions that represent letters or numbers.

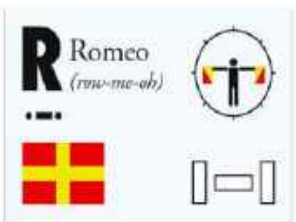
Panel signalling

Panels are visual signals for sending simple messages to an aircraft. Using a limited code, ground forces can send messages to pilots, for example to request medical supplies.









Numbers

Announced DX Operations

www.ng3k.com/Misc/adxo.html

From The Shack of Bill Feidt, NG3K : www.ng3k.com

February						
2025 Feb01	2025 Feb06	Senegal	9G5IK	LoTW	DXW.Net 20250103	By IK7WUL; 10m; SSB; spare time operation; QSL via I8KHC, Club Log OQRS
2025 Feb01	2025 Feb06	Gambia	C5PL NEW	LoTW	DXW.Net 20250119	By LB0OG SP1C SP1FM SQ1GU; 80-6m; CW SSB FT8; POTA WWFF activations; QSL via Club Log OQRS
2025 Feb02	2025 Feb28	Senegal	6W7	Club Log OQRS	DXW.Net 20230914	By ON4AVT as 6W7/ON4AVT fm Warang; 80-10m; SSB + digital; QSL via ON4AVT; operation to continue until Apr 10
2025 Feb04	2025 Feb18	Anguilla	VP2ECV	KG9N (B/d)	OPDX 20250103	By KG9N fm Welches; HF
2025 Feb05	2025 Feb18	Cape Verde Is	D44OA	LoTW	OPDX 20241216	By HB9AOU; 40-10m; CW SSB FT8
2025 Feb07	2025 Mar11	Aruba	P4 NEW	LoTW	TDDX 20250123	By KE4TT as P4/KE4TT; HF; FT8 RTTY CW SSB; QSL via Club Log OQRS, KE4TT
2025 Feb08	2025 Feb15	St Helena	ZD7KYD	KY8D	TDDX 20240925	By KY8D; @ZD7CTO; 17-10m; CW; 50w
2025 Feb11	2025 Feb18	Cocos Keeling	VK9	LoTW	DXW.Net 20241227	By W5EIT as VK9/W5EIT fm West Island; HF; CW FT8, perhaps RTTY SSB
2025 Feb11	2025 Feb23	Marshall Is	V73WW	LoTW	TDDX 20240923	By DK6SP DJ4MX HA8RT M0SDV E77DX DK1YH; 160-6m; CW SSB RTTY FT8; 4 stations; QSL via DJ4MX
2025 Feb12	2025 Feb16	Bahamas	C6ADA	LoTW	425DXN 20241030	By K2KJD K4SGR; HF; CW SSB, some FT8
2025 Feb06	2025 Feb14	Togo	5V0DX	LoTW	DXW.Net 20250103	By IK7WUL; 10m; SSB; spare time operation; QSL via I8KHC
2025 Feb16	2025 Mar04	Sint Martin	PJ7	LoTW	DXW.Net 20241227	By VA3QSL as PJ7/VA3QSL; 40-6m; SSB CW + digital; 100w; Buddipole
2025 Feb16	2025 Feb25	St Pierre & Miquelon	FP	LoTW	DXW.Net 20241230	By F4HEC as FP/F4HEC; 80-6m; SSB CW; QRV for REF SSB Contest; QSL via F4HEC direct
2025 Feb16	2025 Mar04	St Martin	FS	LoTW	DXW.Net 20241227	By VA3QSL as FS/VA3QSL; 40-6m; SSB CW + digital; 100w; Buddipole
2025 Feb18	2025 Mar04	Christmas I	VK9XU	LoTW	DL2AWG 20240911	By DL2AWG DF4GV DL2AMD DJ9RR CK6SJ; HF; CW SSB FT8 RTTY; 500w; 3 stations, 24/7; QSL via DL2AWG (LoTW after 6 months)
2025 Feb19	2025 Feb27	St Martin	FS	DF8AN	TDDX 20241031	By DF8AN as FS/DF8AN; 80-6m, incl 60m; CW + digital, perhaps SSB
2025 Feb26	2025 Mar06	Maldives	8Q7FL	LoTW	DXW.Net 20250113	By JH3QFL fm Keyodhoo I; 40-6m; FT8; QSL via JH3QFL

Also for your convenience, there is a direct link to NG3K on our website. Click on the NG3K DX Page.

February 2025 Contest Calendar - WA7BNM Contest Calendar : www.contestcalendar.com

February 2025	
Vermont QSO Party	0000Z, Feb 1 to 2400Z, Feb 2
LABRE-RS Digi Contest	0000Z, Feb 1 to 2059Z, Feb 2
10-10 Int. Winter Contest, SSB	0001Z, Feb 1 to 2359Z, Feb 2
European Union DX Contest	1200Z, Feb 1 to 1200Z, Feb 2
Mexico RTTY International Contest	1200Z, Feb 1 to 2359Z, Feb 2
Minnesota QSO Party	1400Z-2400Z, Feb 1
FYBO Winter QRP Sprint	1400Z-2400Z, Feb 1
British Columbia QSO Party	1600Z, Feb 1 to 0359Z, Feb 2 and 1600Z-2359Z, Feb 2
AGCW Straight Key Party	1600Z-1900Z, Feb 1
North American Sprint, CW	0000Z-0359Z, Feb 2
Marconi Club ARI Loano Slow CW QSO Party	1300Z-2300Z, Feb 2
K1USN Slow Speed Test	0000Z-0100Z, Feb 3
ICWC Medium Speed Test	1300Z-1400Z, Feb 3
OK1WC Memorial (MWC)	1630Z-1729Z, Feb 3
ICWC Medium Speed Test	1900Z-2000Z, Feb 3
RSGB 80m Club Championship, SSB	2000Z-2130Z, Feb 3
Worldwide Sideband Activity Contest	0100Z-0159Z, Feb 4
ARS Spartan Sprint	0100Z-0300Z, Feb 4
ICWC Medium Speed Test	0300Z-0400Z, Feb 4
QRP Fox Hunt	0200Z-0330Z, Feb 5
Phone Weekly Test	0230Z-0300Z, Feb 5
A1Club AWT	1145Z-1300Z, Feb 5
CWops Test (CWT)	1300Z-1400Z, Feb 5
Mini-Test 40	1700Z-1759Z, Feb 5
VHF-UHF FT8 Activity Contest	1700Z-2100Z, Feb 5
Mini-Test 80	1800Z-1859Z, Feb 5
CWops Test (CWT)	1900Z-2000Z, Feb 5
UKEICC 80m Contest	2000Z-2100Z, Feb 5
Walk for the Bacon QRP Contest	0000Z-0100Z, Feb 6 and 0200Z-0300Z, Feb 7
CWops Test (CWT)	0300Z-0400Z, Feb 6
CWops Test (CWT)	0700Z-0800Z, Feb 6
NRAU 10m Activity Contest	1800Z-1900Z, Feb 6 (CW) and 1900Z-2000Z, Feb 6 (SSB) and 2000Z-2100Z, Feb 6 (FM) and 2100Z-2200Z, Feb 6 (Dig)
SKCC Sprint Europe	2000Z-2200Z, Feb 6
NCCC FT4 Sprint	0100Z-0130Z, Feb 7
Weekly RTTY Test	0145Z-0215Z, Feb 7
QRP Fox Hunt	0200Z-0330Z, Feb 7
NCCC Sprint Ladder	0230Z-0300Z, Feb 7
K1USN Slow Speed Test	2000Z-2100Z, Feb 7
FISTS Saturday Sprint	0000Z-2359Z, Feb 8
CQ WW RTTY WPX Contest	0000Z, Feb 8 to 2359Z, Feb 9
Asia-Pacific Spring Sprint, CW	1100Z-1300Z, Feb 8
Dutch PACC Contest	1200Z, Feb 8 to 1200Z, Feb 9
F9AA Cup, CW	1200Z, Feb 8 to 1200Z, Feb 9
KCJ Topband Contest	1200Z, Feb 8 to 1200Z, Feb 9
SKCC Weekend Sprintathon	1200Z, Feb 8 to 2400Z, Feb 9
OMISS QSO Party	1500Z, Feb 8 to 1500Z, Feb 9
WAB 1.8 MHz Phone	1900Z-2359Z, Feb 8
RSGB 1.8 MHz Contest	2000Z-2300Z, Feb 8
Balkan HF Contest	1300Z-1700Z, Feb 9
K1USN Slow Speed Test	0000Z-0100Z, Feb 10
4 States QRP Group Second Sunday Sprint	0100Z-0300Z, Feb 10
ICWC Medium Speed Test	1300Z-1400Z, Feb 10
ARRL School Club Roundup	1300Z, Feb 10 to 2359Z, Feb 14
OK1WC Memorial (MWC)	1630Z-1729Z, Feb 10
ICWC Medium Speed Test	1900Z-2000Z, Feb 10
Worldwide Sideband Activity Contest	0100Z-0159Z, Feb 11
ICWC Medium Speed Test	0300Z-0400Z, Feb 11
DARC FT4 Contest	1900Z-2029Z, Feb 11
NAQCC CW Sprint	0130Z-0330Z, Feb 12
QRP Fox Hunt	0200Z-0330Z, Feb 12
Phone Weekly Test	0230Z-0300Z, Feb 12
A1Club AWT	1145Z-1300Z, Feb 12
CWops Test (CWT)	1300Z-1400Z, Feb 12
VHF-UHF FT8 Activity Contest	1700Z-2100Z, Feb 12
Mini-Test 40	1700Z-1759Z, Feb 12
Mini-Test 80	1800Z-1859Z, Feb 12
CWops Test (CWT)	1900Z-2000Z, Feb 12
RSGB 80m Club Championship, Data	2000Z-2130Z, Feb 12
CWops Test (CWT)	0300Z-0400Z, Feb 13
CWops Test (CWT)	0700Z-0800Z, Feb 13

February 2025 Contest Calendar - Continued on page 58

February 2025 Contest Calendar - Continued from page 57

PODXS 070 Club Valentine Sprint	0000Z-2359Z, Feb 14
NCCC FT4 Sprint	0100Z-0130Z, Feb 14
Weekly RTTY Test	0145Z-0215Z, Feb 14
QRP Fox Hunt	0200Z-0330Z, Feb 14
NCCC Sprint Ladder	0230Z-0300Z, Feb 14
K1USN Slow Speed Test	2000Z-2100Z, Feb 14
ARRL Inter. DX Contest, CW	0000Z, Feb 15 to 2400Z, Feb 16
YLRL YL-OM Contest	0000Z, Feb 15 to 2359Z, Feb 16
Russian PSK WW Contest	1200Z, Feb 15 to 1159Z, Feb 16
Feld Hell Sprint	1900Z-2059Z, Feb 15
FISTS Sunday Sprint	0000Z-2359Z, Feb 16
Run for the Bacon QRP Contest	2300Z, Feb 16 to 0100Z, Feb 17
K1USN Slow Speed Test	0000Z-0100Z, Feb 17
ICWC Medium Speed Test	1300Z-1400Z, Feb 17
OK1WC Memorial (MWC)	1630Z-1729Z, Feb 17
ICWC Medium Speed Test	1900Z-2000Z, Feb 17
Worldwide Sideband Activity Contest	0100Z-0159Z, Feb 18
ICWC Medium Speed Test	0300Z-0400Z, Feb 18
QRP Fox Hunt	0200Z-0330Z, Feb 19
Phone Weekly Test	0230Z-0300Z, Feb 19
A1Club AWT	1145Z-1300Z, Feb 19
A1Club AWT	1200Z-1300Z, Feb 19
CWops Test (CWT)	1300Z-1400Z, Feb 19
Mini-Test 40	1700Z-1759Z, Feb 19
VHF-UHF FT8 Activity Contest	1700Z-2100Z, Feb 19
Mini-Test 80	1800Z-1859Z, Feb 19
CWops Test (CWT)	1900Z-2000Z, Feb 19
AGCW Semi-Automatic Key Evening	1900Z-2030Z, Feb 19
Walk for the Bacon QRP Contest	0000Z-0100Z, Feb 20 and 0200Z-0300Z, Feb 21
CWops Test (CWT)	0300Z-0400Z, Feb 20
CWops Test (CWT)	0700Z-0800Z, Feb 20
NTC QSO Party	1900Z-2000Z, Feb 20
NCCC FT4 Sprint	0100Z-0130Z, Feb 21
Weekly RTTY Test	0145Z-0215Z, Feb 21
QRP Fox Hunt	0200Z-0330Z, Feb 21
NCCC Sprint Ladder	0230Z-0300Z, Feb 21
K1USN Slow Speed Test	2000Z-2100Z, Feb 21
CQ 160-Meter Contest, SSB	2200Z, Feb 21 to 2200Z, Feb 23
REF Contest, SSB	0600Z, Feb 22 to 1800Z, Feb 23
UBA DX Contest, CW	1300Z, Feb 22 to 1300Z, Feb 23
South Carolina QSO Party	1500Z, Feb 22 to 0159Z, Feb 23
NA Collegiate Championship, RTTY	1800Z, Feb 22 to 0559Z, Feb 23
North American QSO Party, RTTY	1800Z, Feb 22 to 0559Z, Feb 23
World Wide Patagonia DX Contest	0000Z-2359Z, Feb 23
High Speed Club CW Contest	1400Z-1700Z, Feb 23
North Carolina QSO Party	1500Z, Feb 23 to 0100Z, Feb 24
K1USN Slow Speed Test	0000Z-0100Z, Feb 24
ICWC Medium Speed Test	1300Z-1400Z, Feb 24
QCX Challenge	1300Z-1400Z, Feb 24
OK1WC Memorial (MWC)	1630Z-1729Z, Feb 24
QCX Challenge	1900Z-2000Z, Feb 24
ICWC Medium Speed Test	1900Z-2000Z, Feb 24
RSGB FT4 Contest	2000Z-2200Z, Feb 24
Worldwide Sideband Activity Contest	0100Z-0159Z, Feb 25
ICWC Medium Speed Test	0300Z-0400Z, Feb 25
QCX Challenge	0300Z-0400Z, Feb 25
SKCC Sprint	0000Z-0200Z, Feb 26
QRP Fox Hunt	0200Z-0330Z, Feb 26
Phone Weekly Test	0230Z-0300Z, Feb 26
A1Club AWT	1145Z-1300Z, Feb 26
CWops Test (CWT)	1300Z-1400Z, Feb 26
Mini-Test 40	1700Z-1759Z, Feb 26
Mini-Test 80	1800Z-1859Z, Feb 26
CWops Test (CWT)	1900Z-2000Z, Feb 26
UKEICC 80m Contest	2000Z-2100Z, Feb 26
CWops Test (CWT)	0300Z-0400Z, Feb 27
CWops Test (CWT)	0700Z-0800Z, Feb 27
RSGB 80m Club Championship, CW	2000Z-2130Z, Feb 27
NCCC FT4 Sprint	0100Z-0130Z, Feb 28
Weekly RTTY Test	0145Z-0215Z, Feb 28
QRP Fox Hunt	0200Z-0330Z, Feb 28
NCCC Sprint Ladder	0230Z-0300Z, Feb 28
K1USN Slow Speed Test	2000Z-2100Z, Feb 28

2025 Club Committees

Standing Committees	Committee Chairs
Budget	**John O'Connell, K2QA**
Constitution & By-Laws	**Ron Block, NR2B**
Education	**Chris Prioli, AD2CS**
Field Day	**Tony Starr, K3TS**
Hamfest	**Sheldon Parker, K2MEN and Bill Price, NJ2S**
Health, Welfare, & Silent Keys	**Bill Price, NJ2S**
Hospitality	**Jeff Garth, WB2ZBN**
Membership & Membership Badges	**Chris Prioli, AD2CS**
Nominations	**Jon Pearce, WB2MNF**
Publicity	**Mike Resnick, N2WOQ**
Repeaters	***Open Chair***
Volunteer Examiner Liaison	***Chris Prioli, AD2CS***
W2MMD Clubhouse Site	**Al Arrison, KB2AYU**

Activity Committees	Committee Chairs
Awards & Certificates	**GCARC Board of Directors**
Club Photographer	**Phil Nunzio, WA3RGY**
Club Publications & Historian	**Jeff Garth, WB2ZBN**
Contests	**Tony Starr, K3TS**
GCARC Foxhunts	**Jim Wright, N2GXJ**
GC-ARES Emergency Coordinator	**Bob Keogh, KD2NEC**
Holiday Dinner Party	**Frank Romeo, N3PUU & Kathy Romeo**
Membership Roster Database	**Jeff Garth, WB2ZBN**
Programs : General Membership Meetings	**Ron Block, NR2B**
Radio Nets	***Open Chair***
Technical (Tech Saturday, TechNets)	**Jon Pearce, WB2MNF**
W2MMD License Trustee	**Darrell Neron, AB2E**
W2MMD Special Event Station	**Mark Gottlieb, KK2L**

GCARC <*at*> Mailman <*dot*> QTH <*dot*> Net e-mail reflector guidelines

1. **No attachments** (e.g. pictures, files) are allowed on the reflector.
2. If you have Club-related pictures that you would like to share, you can send them to the webmaster, he will put them on the website and will send out a general e-mail to all the members.
3. Otherwise, the pictures will have to be sent to the members' addresses.
4. URLs/Hyperlinks are acceptable on the reflector.
5. Do not send any messages with e-mail addresses in the **BCC** (**Blind Carbon Copy**) field. The message will be rejected. Use only the **To:** or **CC:** fields.
6. Members are subscribed to the reflector using the member's e-mail address from the roster database. You must use that address when sending an e-mail via the reflector.
7. If you use another address on the reflector, the message will get rejected or "*bounced*", because the reflector does not recognize that address. Whenever a message sent to reflector is rejected or *"bounced"* for various reasons, the administrator has to log-in to the Mailman.QTH website and approve the message.

The W2MMD Repeaters

2 Meter Repeater
Output : 147.180 MHz
Input : 147.780 MHz
Offset : +600 kHz - PL : 131.8 Hz
(Conventional FM plus C4FM Capability)
EchoLink : W2MMD-R

70 cm Repeater
Output : 442.100 MHz
Input : 447.100 MHz
Offset : +5 MHz - PL : 131.8 Hz
(Conventional FM plus C4FM Capability)

The above repeaters are both
located in Pitman, NJ
GPS : 39.728481°, -75.131088°

1.25 Meter Repeater
Output : 224.660 MHz
Input : 223.060 MHz
Offset : -1.6 MHz - PL : 131.8 Hz
Location : Sewell, NJ
GPS : 39.746738°, -75.077094°

SKYWARN™ Net
Sunday @ 1930 : 147.180 MHz Repeater

Gloucester County ARES Net
Sunday @ 2000 : 147.180 MHz Repeater

GCARC TechNet ZOOM Forum
Available Every Monday @ 1930 Hours
Join ZOOM Meeting Link :
https://bit.ly/3K8bWwj

Tuesday AfterNoon 2M Net @ 1200 Hours

Tuesday & Thursday 10 Meter Net @ 1930 Hours
28.465 MHz or 28.475 MHz

Monday & Thursday Night 40M Net
1930 Hours
7.225 MHz (+/- 5 or 10 kHz)

Thursday 2M Net @ 2000 Hours

Meeting Calendar

General Membership Meeting
Wednesday, February 5, 2025
1900 Hours
Pfeiffer Community Center
Simulcast Live on ZOOM
Meeting ID : 914 7364 1808
Passcode : 843147
Join ZOOM Meeting Link :
https://bit.ly/3Pt4dLO

Board of Directors Meeting
Wednesday, February 19, 2025
1900 Hours
W2MMD Clubhouse

"There's More To Ham Radio Than You Can Possibly Do!"
- K3TS

"The big thing about being in a club and being a "Ham" is to help each other when there is a need "
- W2SEF

*** Badges ***

Need a new or replacement badge
Contact "*The Badge Man*"

Chris Prioli, AD2CS
chris@ad2cs.com

Question Pool Answers : E2B01:A; E2B02:C; E2B03:D; E2B04:A; E2B05:C; E2B06:A; E2B07:B; E2B08:A; E2B09:D; E2B10:A; E2B11:B; E2B12:A